

FIG. 1

Met Thr Pro Leu Gly Pro Ala
TCTAGAAAAACCAAGGAGGTAATAAATA ATG ACT CCA TTA GGT CCT GCT

Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys Cys Leu Glu Gln
TCT TCT CTG CCG CAA AGC TTT CTG CTG AAA TGT CTG GAA CAG

Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln Glu Lys Leu
GTT CGT AAA ATC CAG GGT GAC GGT GCT GCA CTG CAA GAA AAA CTG

Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu Val Leu Leu
TGC GCT ACT TAC AAA CTG TGC CAT CCG GAA GAG CTG GTA CTG CTG

Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser Cys Pro
GGT CAT TCT CTT GGG ATC CCG TGG GCT CCG CTG TCT TCT TGT CCA

Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His Ser
TCT CAA GCT CTT CAG CTG GCT GGT TGT CTG TCT CAA CTG CAT TCT

Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile
GGT CTG TTC CTG TAT CAG GGT CTT CTG CAA GCT CTG GAA GGT ATC

Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val
TCT CCG GAA CTG GGT CCG ACT CTG GAC ACT CTG CAG CTA GAT GTA

Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly
GCT GAC TTT GCT ACT ACT ATT TGG CAA CAG ATG GAA GAG CTC GGT

Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe
ATG GCA CCA GCT CTG CAA CCG ACT CAA GGT GCT ATG CCG GCA TTC

Ala Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser
GCT TCT GCA TTC CAG CGT CGT GCA GGA GGT GTA CTG GTT GCT TCT

His Leu Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His
CAT CTG CAA TCT TTC CTG GAA GTA TCT TAC CGT GTT CTG CGT CAT

Leu Ala Gln Pro OC AM
CTG GCT CAG CCG TAA TAG AATTC

FIG. 2A
 rhG-CSF

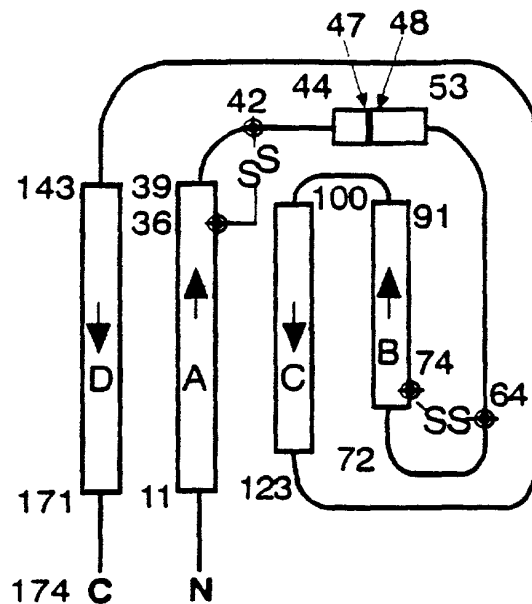


FIG. 2B
 hGH

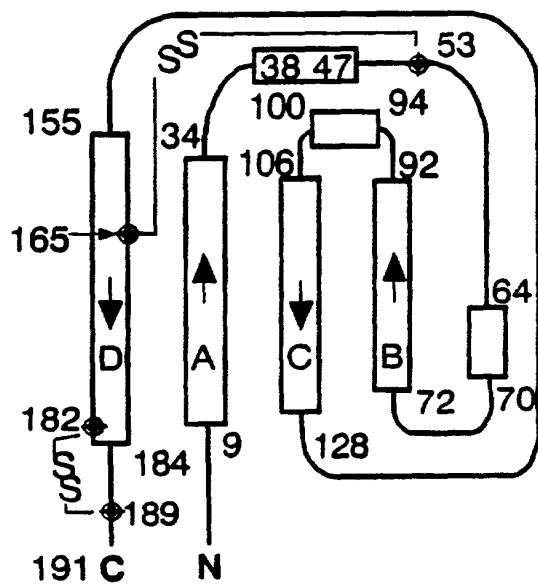


FIG. 2C

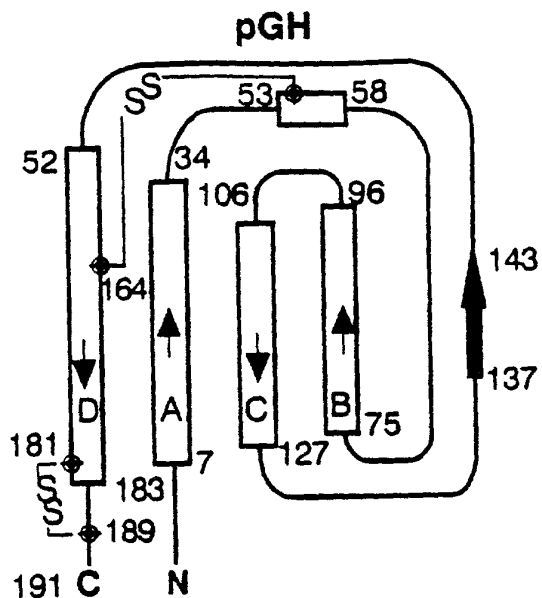


FIG. 2D

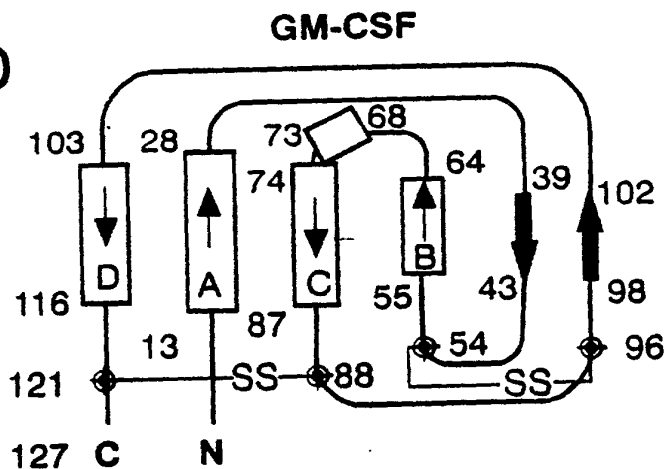


FIG. 2E

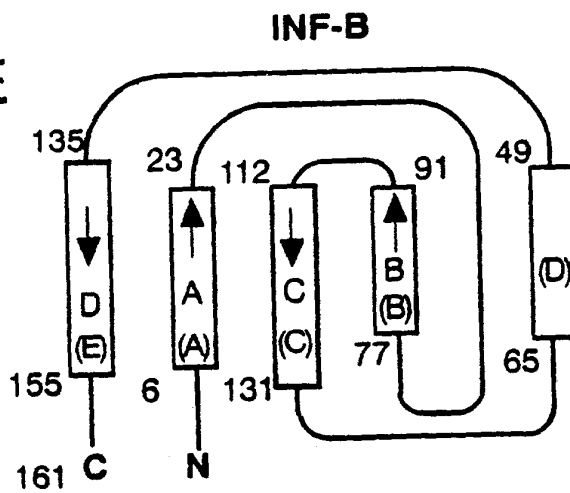


FIG. 2F

IL-2

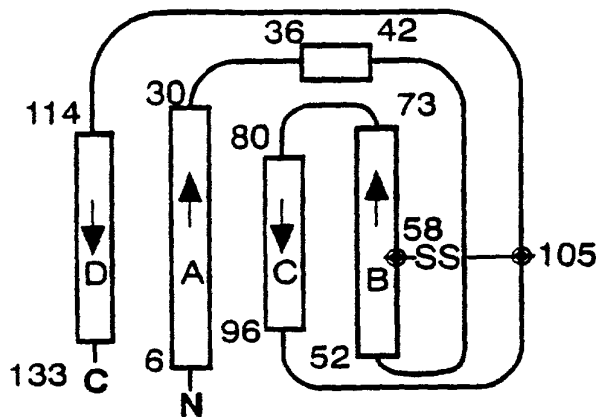
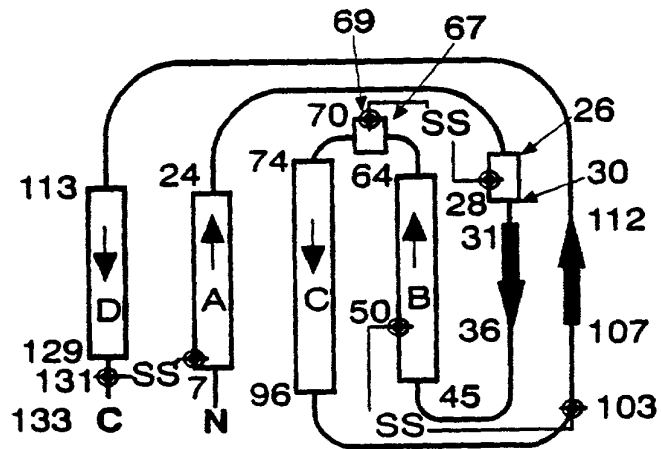
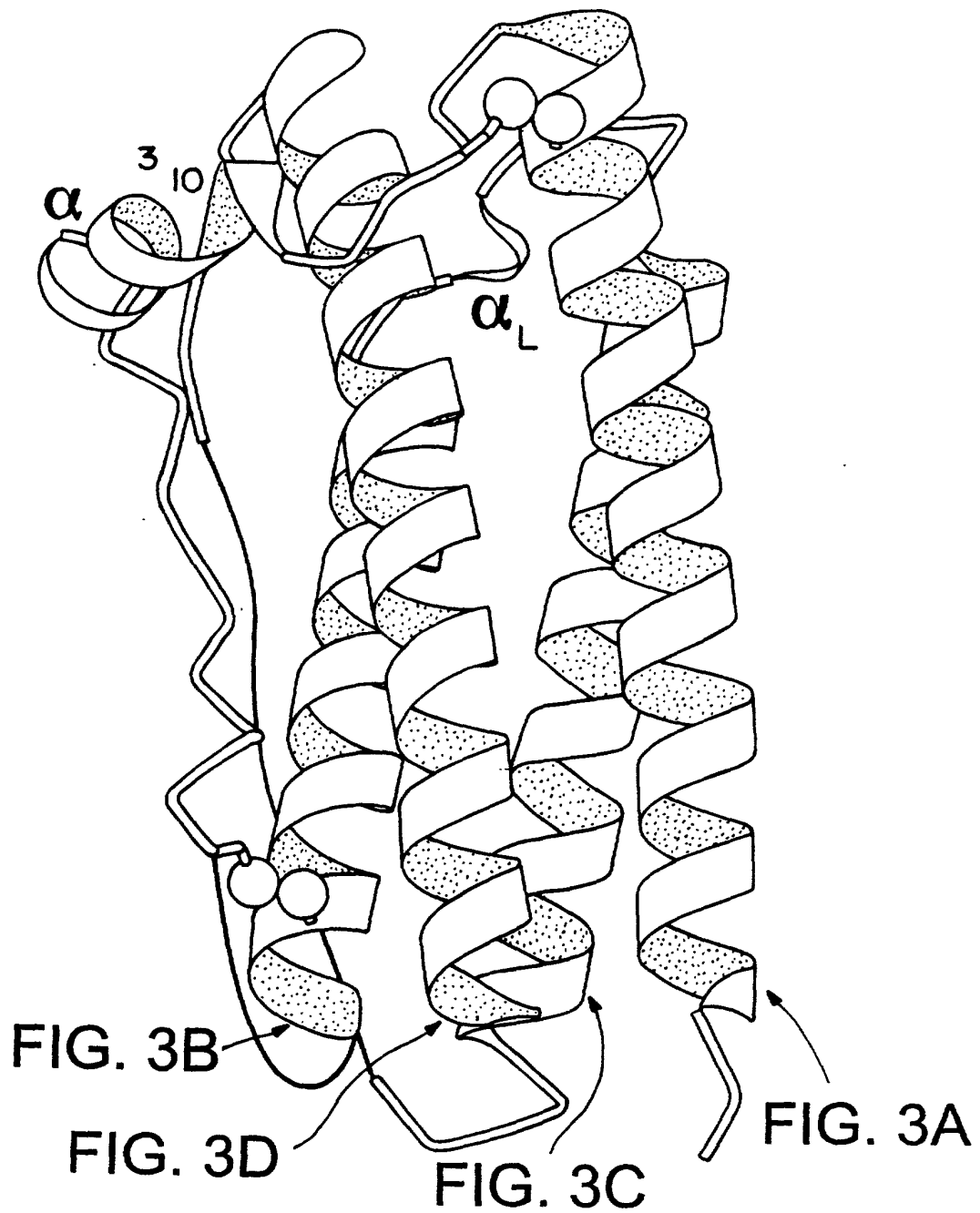


FIG. 2G

IL-4





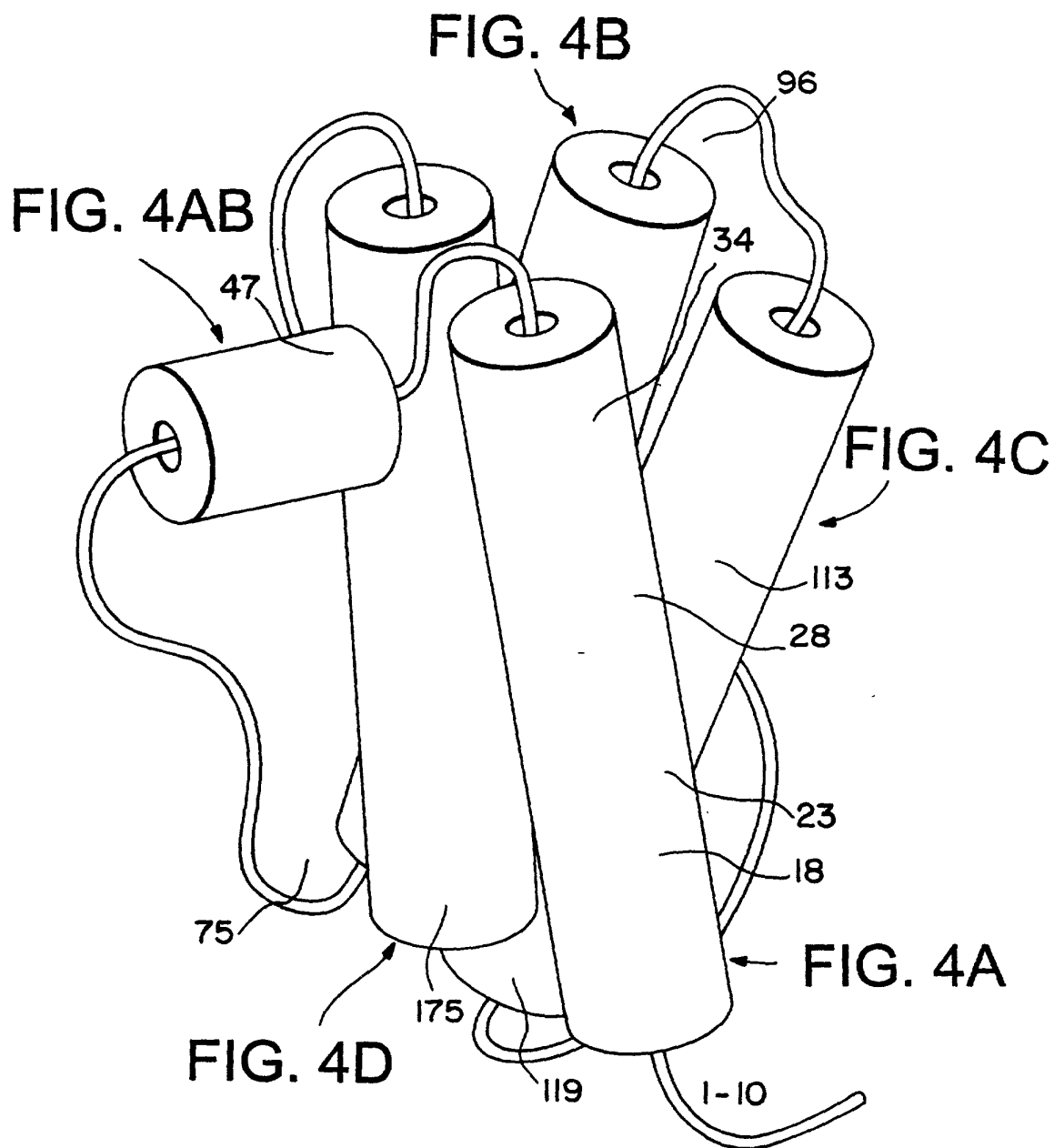


FIG. 5A

ATOM	1	CB LEU	10	58.751	58.191	-14.868	1.00	61.22	AI	ATOM	43	CG PHE	14	58.618	59.669	-8.866	1.00	42.88	AI
ATOM	2	CG LEU	10	58.360	59.271	-13.939	1.00	60.19	AI	ATOM	44	CD1 PHE	14	58.052	59.594	-10.123	1.00	40.40	AI
ATOM	3	CD1 LEU	10	59.307	60.461	-14.022	1.00	60.14	AI	ATOM	45	CD2 PHE	14	58.264	60.673	-7.978	1.00	40.30	AI
ATOM	4	CD2 LEU	10	56.954	59.638	-14.335	1.00	60.68	AI	ATOM	46	CE1 PHE	14	57.114	60.518	-10.507	1.00	39.59	AI
ATOM	5	C LEU	10	60.544	56.734	-13.849	1.00	62.85	AI	ATOM	47	CE2 PHE	14	57.329	61.587	-8.380	1.00	41.82	AI
ATOM	6	O LEU	10	60.079	55.595	-14.041	1.00	63.08	AI	ATOM	48	CZ PHE	14	56.751	61.515	-9.635	1.00	41.56	AI
ATOM	7	HT1 LEU	10	59.876	56.135	-15.998	1.00	0.00	AI	ATOM	49	C PHE	14	57.605	57.263	-7.661	1.00	45.83	AI
ATOM	8	HT2 LEU	10	61.323	56.887	-16.434	1.00	0.00	AI	ATOM	50	O PHE	14	56.789	57.588	-6.805	1.00	46.07	AI
ATOM	9	N LEU	10	60.328	57.059	-16.204	1.00	62.24	AI	ATOM	51	N LEU	15	57.298	56.509	-8.718	1.00	44.64	AI
ATOM	10	HT3 LEU	10	59.817	57.535	-16.971	1.00	0.00	AI	ATOM	52	H LEU	15	58.024	56.183	-9.287	1.00	0.00	AI
ATOM	11	CA LEU	10	60.183	57.758	-14.941	1.00	62.58	AI	ATOM	53	CA LEU	15	55.940	56.181	-9.038	1.00	44.53	AI
ATOM	12	N PRO	11	61.357	56.962	-12.780	1.00	61.96	AI	ATOM	54	CB LEU	15	55.858	55.402	-10.300	1.00	48.74	AI
ATOM	13	CD PRO	11	61.960	58.238	-12.383	1.00	61.21	AI	ATOM	55	CG LEU	15	54.853	56.013	-11.289	1.00	51.65	AI
ATOM	14	CA PRO	11	61.832	55.889	-11.906	1.00	61.34	AI	ATOM	56	CD1 LEU	15	55.525	57.121	-12.105	1.00	50.33	AI
ATOM	15	CB PRO	11	62.915	56.547	-11.043	1.00	59.77	AI	ATOM	57	CD2 LEU	15	54.320	54.906	-12.204	1.00	53.77	AI
ATOM	16	CG PRO	11	62.511	57.983	-10.975	1.00	59.16	AI	ATOM	58	C LEU	15	55.169	55.410	-8.014	1.00	44.07	AI
ATOM	17	C PRO	11	60.712	55.225	-11.109	1.00	60.68	AI	ATOM	59	O LEU	15	53.945	55.567	-7.959	1.00	45.46	AI
ATOM	18	O PRO	11	60.075	55.843	-10.250	1.00	61.73	AI	ATOM	60	N LEU	16	55.809	54.620	-7.166	1.00	43.18	AI
ATOM	19	N GLN	12	60.466	53.946	-11.407	1.00	59.31	AI	ATOM	61	H LEU	16	56.781	54.503	-7.251	1.00	0.00	AI
ATOM	20	H GLN	12	60.944	53.573	-12.175	1.00	0.00	AI	ATOM	62	CA LEU	16	55.110	53.913	-6.095	1.00	42.96	AI
ATOM	21	CA GLN	12	59.468	53.121	-10.743	1.00	57.22	AI	ATOM	63	CB LEU	16	55.866	52.623	-5.751	1.00	43.34	AI
ATOM	22	CB GLN	12	59.779	51.646	-10.970	1.00	59.27	AI	ATOM	64	CG LEU	16	55.840	51.608	-6.868	1.00	42.25	AI
ATOM	23	CG GLN	12	58.620	50.714	-10.591	1.00	59.70	AI	ATOM	65	CD1 LEU	16	56.889	50.567	-6.596	1.00	43.68	AI
ATOM	24	CD GLN	12	57.604	50.575	-11.702	1.00	61.71	AI	ATOM	66	CD2 LEU	16	54.413	51.068	-7.030	1.00	42.75	AI
ATOM	25	OE1 GLN	12	57.170	49.465	-11.970	1.00	65.82	AI	ATOM	67	C LEU	16	54.963	54.778	-4.852	1.00	42.35	AI
ATOM	26	NE2 GLN	12	57.227	51.534	-12.541	1.00	63.02	AI	ATOM	68	O LEU	16	54.077	54.579	-4.018	1.00	42.65	AI
ATOM	27	HE21 GLN	12	57.639	52.419	-12.489	1.00	0.00	AI	ATOM	69	N LYS	17	55.823	55.779	-4.703	1.00	42.47	AI
ATOM	28	HE22 GLN	12	56.500	51.308	-13.156	1.00	0.00	AI	ATOM	70	H LYS	17	56.587	55.840	-5.320	1.00	0.00	AI
ATOM	29	C GLN	12	59.336	53.347	-9.245	1.00	55.34	AI	ATOM	71	CA LYS	17	55.681	56.767	-3.650	1.00	42.07	AI
ATOM	30	O GLN	12	58.242	53.196	-8.708	1.00	54.56	AI	ATOM	72	CB LYS	17	56.995	57.554	-3.573	1.00	44.14	AI
ATOM	31	N SER	13	60.423	53.732	-8.576	1.00	53.44	AI	ATOM	73	CG LYS	17	57.214	58.197	-2.223	1.00	49.61	AI
ATOM	32	H SER	13	61.276	53.839	-9.033	1.00	0.00	AI	ATOM	74	CD LYS	17	57.114	57.164	-1.086	1.00	55.15	AI
ATOM	33	CA SER	13	60.335	53.974	-7.168	1.00	52.86	AI	ATOM	75	CE LYS	17	56.747	57.804	0.293	1.00	62.05	AI
ATOM	34	CB SER	13	61.704	54.144	-6.626	1.00	52.24	AI	ATOM	76	NZ LYS	17	55.462	58.533	0.331	1.00	65.43	AI
ATOM	35	OG SER	13	61.702	53.493	-5.362	1.00	56.64	AI	ATOM	77	HZ1 LYS	17	54.684	57.884	0.098	1.00	0.00	AI
ATOM	36	HG SER	13	61.534	52.551	-5.477	1.00	0.00	AI	ATOM	78	HZ2 LYS	17	55.482	59.308	-0.362	1.00	0.00	AI
ATOM	37	C SER	13	59.497	55.214	-6.900	1.00	52.58	AI	ATOM	79	HZ3 LYS	17	55.312	58.926	1.282	1.00	0.00	AI
ATOM	38	O SER	13	58.509	55.144	-6.160	1.00	53.55	AI	ATOM	80	C LYS	17	54.463	57.640	-4.051	1.00	41.20	AI
ATOM	39	N PHE	14	59.791	56.333	-7.577	1.00	50.84	AI	ATOM	81	O LYS	17	53.648	57.999	-3.186	1.00	40.66	AI
ATOM	40	H PHE	14	60.469	56.292	-8.279	1.00	0.00	AI	ATOM	82	N CYS	18	54.272	57.992	-5.346	1.00	39.13	AI
ATOM	41	CA PHE	14	59.067	57.590	-7.423	1.00	47.21	AI	ATOM	83	H CYS	18	54.998	57.809	-5.981	1.00	0.00	AI
ATOM	42	CB PHE	14	59.611	58.590	-8.454	1.00	44.68	AI	ATOM	84	CA CYS	18	53.080	58.656	-5.802	1.00	37.42	AI
										ATOM	85	CB CYS	18	53.092	58.891	-7.261	1.00	35.02	AI

FIG. 5B

ATOM	86	SG	CYS	18	54.421	60.026	-7.681	1.00	40.40	A1	ATOM	129	H	ARG	23	47.440	56.819	-3.056	1.00	0.00	A1
ATOM	87	C	CYS	18	51.859	57.789	-5.502	1.00	39.33	A1	ATOM	130	CA	ARG	23	45.667	56.593	-1.892	1.00	20.67	A1
ATOM	88	O	CYS	18	50.959	58.346	-4.847	1.00	40.83	A1	ATOM	131	CB	ARG	23	46.104	55.135	-1.635	1.00	20.45	A1
ATOM	89	N	LEU	19	51.738	56.475	-5.842	1.00	37.15	A1	ATOM	132	CG	ARG	23	46.325	54.321	-2.904	1.00	17.51	A1
ATOM	90	H	LEU	19	52.462	56.038	-6.341	1.00	0.00	A1	ATOM	133	CD	ARG	23	45.095	54.446	-3.769	1.00	21.54	A1
ATOM	91	CA	LEU	19	50.521	55.702	-5.534	1.00	36.00	A1	ATOM	134	CE	ARG	23	45.076	53.437	-4.809	1.00	24.82	A1
ATOM	92	CB	LEU	19	50.644	54.204	-5.947	1.00	38.31	A1	ATOM	135	HE	ARG	23	45.642	52.647	-4.701	1.00	0.00	A1
ATOM	93	CG	LEU	19	49.410	53.271	-5.657	1.00	40.86	A1	ATOM	136	CZ	ARG	23	44.323	53.556	-5.904	1.00	27.69	A1
ATOM	94	CD1	LEU	19	48.208	53.684	-6.467	1.00	39.71	A1	ATOM	137	NH1	ARG	23	43.567	54.669	-6.006	1.00	29.51	A1
ATOM	95	CD2	LEU	19	49.692	51.833	-6.113	1.00	45.71	A1	ATOM	138	HH11	ARG	23	43.562	55.377	-5.303	1.00	0.00	A1
ATOM	96	C	LEU	19	50.102	55.736	-4.076	1.00	33.52	A1	ATOM	139	HH12	ARG	23	42.956	54.730	-6.789	1.00	0.00	A1
ATOM	97	O	LEU	19	48.930	55.949	-3.766	1.00	32.75	A1	ATOM	140	NH2	ARG	23	44.345	52.604	-6.891	1.00	24.22	A1
ATOM	98	N	GLU	20	51.030	55.576	-3.166	1.00	31.88	A1	ATOM	141	HH21	ARG	23	43.780	52.713	-7.709	1.00	0.00	A1
ATOM	99	H	GLU	20	51.940	55.338	-3.455	1.00	0.00	A1	ATOM	142	HH22	ARG	23	44.936	51.802	-6.793	1.00	0.00	A1
ATOM	100	CA	GLU	20	50.750	55.710	-1.748	1.00	33.40	A1	ATOM	143	C	ARG	23	45.458	57.285	-0.560	1.00	20.56	A1
ATOM	101	CB	GLU	20	52.053	55.334	-1.167	1.00	35.25	A1	ATOM	144	O	ARG	23	44.374	57.254	0.042	1.00	20.04	A1
ATOM	102	CG	GLU	20	52.508	55.504	0.260	1.00	43.21	A1	ATOM	145	N	LYS	24	46.485	58.015	-0.118	1.00	22.67	A1
ATOM	103	CD	GLU	20	53.948	54.947	0.407	1.00	51.06	A1	ATOM	146	H	LYS	24	47.291	58.105	-0.668	1.00	0.00	A1
ATOM	104	OE1	GLU	20	54.320	54.660	1.546	1.00	56.78	A1	ATOM	147	CA	LYS	24	46.431	58.729	1.166	1.00	22.85	A1
ATOM	105	OE2	GLU	20	54.708	54.766	-0.570	1.00	51.57	A1	ATOM	148	CB	LYS	24	47.811	59.255	1.506	1.00	26.86	A1
ATOM	106	C	GLU	20	50.230	57.117	-1.326	1.00	33.25	A1	ATOM	149	CG	LYS	24	47.821	59.661	2.971	1.00	33.79	A1
ATOM	107	O	GLU	20	49.432	57.291	-0.380	1.00	33.30	A1	ATOM	150	CD	LYS	24	49.121	60.265	3.404	1.00	40.73	A1
ATOM	108	N	GLN	21	50.660	58.167	-2.044	1.00	32.33	A1	ATOM	151	CE	LYS	24	50.258	59.258	3.335	1.00	46.19	A1
ATOM	109	H	GLN	21	51.270	58.004	-2.794	1.00	0.00	A1	ATOM	152	NZ	LYS	24	51.532	59.975	3.333	1.00	51.19	A1
ATOM	110	CA	GLN	21	50.275	59.538	-1.742	1.00	31.00	A1	ATOM	153	HZ1	LYS	24	51.637	60.498	4.225	1.00	0.00	A1
ATOM	111	CB	GLN	21	51.326	60.489	-2.340	1.00	32.37	A1	ATOM	154	HZ2	LYS	24	51.539	60.651	2.539	1.00	0.00	A1
ATOM	112	CG	GLN	21	52.436	60.530	-1.272	1.00	38.01	A1	ATOM	155	HZ3	LYS	24	52.317	59.303	3.216	1.00	0.00	A1
ATOM	113	CD	GLN	21	53.622	61.460	-1.504	1.00	42.67	A1	ATOM	156	C	LYS	24	45.455	59.893	1.101	1.00	21.66	A1
ATOM	114	OE1	GLN	21	54.008	62.236	-0.615	1.00	43.63	A1	ATOM	157	O	LYS	24	44.588	60.068	1.962	1.00	20.90	A1
ATOM	115	NE2	GLN	21	54.256	61.448	-2.678	1.00	42.31	A1	ATOM	158	N	ILE	25	45.549	60.696	0.044	1.00	21.66	A1
ATOM	116	HE21	GLN	21	53.965	60.840	-3.384	1.00	0.00	A1	ATOM	159	H	ILE	25	46.242	60.509	-0.629	1.00	0.00	A1
ATOM	117	HE22	GLN	21	55.026	62.052	-2.730	1.00	0.00	A1	ATOM	160	CA	ILE	25	44.667	61.841	-0.115	1.00	22.53	A1
ATOM	118	C	GLN	21	48.894	59.765	-2.288	1.00	28.51	A1	ATOM	161	CB	ILE	25	45.075	62.694	-1.307	1.00	22.15	A1
ATOM	119	O	GLN	21	48.027	60.242	-1.563	1.00	28.65	A1	ATOM	162	CG2	ILE	25	44.097	63.834	-1.439	1.00	20.44	A1
ATOM	120	N	VAL	22	48.682	59.319	-3.521	1.00	25.85	A1	ATOM	163	CG1	ILE	25	46.475	63.230	-1.136	1.00	21.03	A1
ATOM	121	H	VAL	22	49.448	58.980	-4.013	1.00	0.00	A1	ATOM	164	CD	ILE	25	47.188	63.281	-2.497	1.00	20.03	A1
ATOM	122	CA	VAL	22	47.382	59.303	-4.161	1.00	24.94	A1	ATOM	165	C	ILE	25	43.263	61.308	-0.352	1.00	24.75	A1
ATOM	123	CB	VAL	22	47.508	58.614	-5.526	1.00	24.09	A1	ATOM	166	O	ILE	25	42.339	61.839	0.301	1.00	26.13	A1
ATOM	124	CG1	VAL	22	46.154	58.378	-6.096	1.00	19.97	A1	ATOM	167	N	GLN	26	43.065	60.289	-1.244	1.00	22.79	A1
ATOM	125	CG2	VAL	22	48.252	59.479	-6.498	1.00	25.82	A1	ATOM	168	H	GLN	26	43.842	59.926	-1.726	1.00	0.00	A1
ATOM	126	C	VAL	22	46.418	58.549	-3.226	1.00	25.65	A1	ATOM	169	CA	GLN	26	41.737	59.713	-1.437	1.00	20.12	A1
ATOM	127	O	VAL	22	45.428	59.190	-2.800	1.00	29.31	A1	ATOM	170	CB	GLN	26	41.729	58.539	-2.341	1.00	18.89	A1
ATOM	128	N	ARG	23	46.643	57.291	-2.759	1.00	23.93	A1	ATOM	171	CG	GLN	26	42.203	59.042	-3.627	1.00	19.77	A1

FIG. 5C

ATOM	172	CD	GLN	26	42.163	57.996	-4.684	1.00	24.26	AI	ATOM	215	CD1	LEU	32	35.516	67.082	5.499	1.00	32.87	AI
ATOM	173	OE1	GLN	26	42.550	56.853	-4.465	1.00	26.82	AI	ATOM	216	CD2	LEU	32	36.555	67.267	3.181	1.00	30.97	AI
ATOM	174	NE2	GLN	26	41.732	58.351	-5.890	1.00	27.68	AI	ATOM	217	C	LEU	32	34.133	63.597	4.518	1.00	27.87	AI
ATOM	175	HE21	GLN	26	41.421	59.265	-6.042	1.00	0.00	AI	ATOM	218	O	LEU	32	33.169	63.889	5.250	1.00	25.93	AI
ATOM	176	HE22	GLN	26	41.743	57.649	-6.552	1.00	0.00	AI	ATOM	219	N	GLN	33	33.977	63.028	3.315	1.00	27.51	AI
ATOM	177	C	GLN	26	41.207	59.239	-0.111	1.00	21.88	AI	ATOM	220	H	GLN	33	34.787	62.826	2.802	1.00	0.00	AI
ATOM	178	O	GLN	26	40.067	59.550	0.220	1.00	27.02	AI	ATOM	221	CA	GLN	33	32.687	62.671	2.775	1.00	30.40	AI
ATOM	179	N	GLY	27	41.952	58.622	0.773	1.00	22.54	AI	ATOM	222	CB	GLN	33	32.737	61.721	1.614	1.00	29.47	AI
ATOM	180	H	GLY	27	42.891	58.420	0.576	1.00	0.00	AI	ATOM	223	CG	GLN	33	32.888	62.584	0.436	1.00	29.26	AI
ATOM	181	CA	GLY	27	41.386	58.191	2.037	1.00	25.55	AI	ATOM	224	CD	GLN	33	33.015	61.869	-0.887	1.00	30.21	AI
ATOM	182	C	GLY	27	40.936	59.352	2.890	1.00	27.80	AI	ATOM	225	OE1	GLN	33	34.064	61.495	-1.452	1.00	29.61	AI
ATOM	183	O	GLY	27	39.889	59.251	3.526	1.00	29.95	AI	ATOM	226	NE2	GLN	33	31.823	61.759	-1.426	1.00	33.19	AI
ATOM	184	N	ASP	28	41.683	60.460	2.915	1.00	29.39	AI	ATOM	227	HE21	GLN	33	31.781	61.328	-2.302	1.00	0.00	AI
ATOM	185	H	ASP	28	42.547	60.454	2.448	1.00	0.00	AI	ATOM	228	HE22	GLN	33	31.042	62.060	-0.914	1.00	0.00	AI
ATOM	186	CA	ASP	28	41.257	61.680	3.624	1.00	28.45	AI	ATOM	229	C	GLN	33	31.839	61.963	3.788	1.00	35.60	AI
ATOM	187	CB	ASP	28	42.266	62.789	3.552	1.00	30.13	AI	ATOM	230	O	GLN	33	30.715	62.416	4.073	1.00	36.49	AI
ATOM	188	CG	ASP	28	43.737	62.502	3.777	1.00	31.72	AI	ATOM	231	N	GLU	34	32.386	60.925	4.438	1.00	39.81	AI
ATOM	189	OD1	ASP	28	44.539	63.024	2.995	1.00	31.95	AI	ATOM	232	H	GLU	34	33.340	60.707	4.328	1.00	0.00	AI
ATOM	190	OD2	ASP	28	44.063	61.811	4.741	1.00	32.00	AI	ATOM	233	CA	GLU	34	31.541	60.131	5.304	1.00	43.24	AI
ATOM	191	C	ASP	28	39.994	62.264	2.960	1.00	25.81	AI	ATOM	234	CB	GLU	34	32.228	58.792	5.571	1.00	46.46	AI
ATOM	192	O	ASP	28	39.101	62.699	3.655	1.00	26.21	AI	ATOM	235	CG	GLU	34	33.274	58.721	6.624	1.00	55.01	AI
ATOM	193	N	GLY	29	39.882	62.270	1.631	1.00	23.93	AI	ATOM	236	CD	GLU	34	32.777	58.092	7.930	1.00	60.29	AI
ATOM	194	H	GLY	29	40.660	61.950	1.135	1.00	0.00	AI	ATOM	237	OE1	GLU	34	33.483	57.186	8.412	1.00	63.26	AI
ATOM	195	CA	GLY	29	38.729	62.694	0.886	1.00	25.69	AI	ATOM	238	OE2	GLU	34	31.724	58.504	8.459	1.00	60.44	AI
ATOM	196	C	GLY	29	37.528	61.961	1.418	1.00	27.36	AI	ATOM	239	C	GLU	34	31.218	60.877	6.564	1.00	43.59	AI
ATOM	197	O	GLY	29	36.648	62.558	2.061	1.00	28.14	AI	ATOM	240	O	GLU	34	30.175	60.631	7.161	1.00	44.87	AI
ATOM	198	N	ALA	30	37.646	60.628	1.295	1.00	27.85	AI	ATOM	241	N	LYS	35	32.045	61.811	6.998	1.00	44.80	AI
ATOM	199	H	ALA	30	38.442	60.288	0.843	1.00	0.00	AI	ATOM	242	H	LYS	35	32.923	61.931	6.569	1.00	0.00	AI
ATOM	200	CA	ALA	30	36.683	59.655	1.814	1.00	25.94	AI	ATOM	243	CA	LYS	35	31.674	62.634	8.134	1.00	45.43	AI
ATOM	201	CB	ALA	30	37.269	58.303	1.556	1.00	22.15	AI	ATOM	244	CB	LYS	35	32.881	63.364	8.686	1.00	47.67	AI
ATOM	202	C	ALA	30	36.356	59.842	3.308	1.00	27.18	AI	ATOM	245	CG	LYS	35	33.701	62.414	9.510	1.00	52.75	AI
ATOM	203	O	ALA	30	35.194	59.772	3.754	1.00	28.82	AI	ATOM	246	CD	LYS	35	35.084	63.021	9.548	1.00	57.55	AI
ATOM	204	N	ALA	31	37.340	60.105	4.150	1.00	27.16	AI	ATOM	247	CE	LYS	35	36.067	62.099	10.238	1.00	60.35	AI
ATOM	205	H	ALA	31	38.253	60.114	3.809	1.00	0.00	AI	ATOM	248	NZ	LYS	35	35.810	62.064	11.669	1.00	62.91	AI
ATOM	206	CA	ALA	31	37.113	60.470	5.531	1.00	27.70	AI	ATOM	249	HZ1	LYS	35	34.838	61.733	11.840	1.00	0.00	AI
ATOM	207	CB	ALA	31	38.383	60.881	6.177	1.00	27.65	AI	ATOM	250	HZ2	LYS	35	35.930	63.011	12.078	1.00	0.00	AI
ATOM	208	C	ALA	31	36.178	61.675	5.660	1.00	30.01	AI	ATOM	251	HZ3	LYS	35	36.477	61.405	12.119	1.00	0.00	AI
ATOM	209	O	ALA	31	35.195	61.624	6.413	1.00	32.91	AI	ATOM	252	C	LYS	35	30.630	63.660	7.697	1.00	44.45	AI
ATOM	210	N	LEU	32	36.397	62.744	4.895	1.00	27.63	AI	ATOM	253	O	LYS	35	29.730	63.999	8.478	1.00	44.61	AI
ATOM	211	H	LEU	32	37.133	62.734	4.242	1.00	0.00	AI	ATOM	254	N	LEU	36	30.652	64.190	6.480	1.00	41.21	AI
ATOM	212	CA	LEU	32	35.560	63.898	4.997	1.00	28.52	AI	ATOM	255	H	LEU	36	31.343	63.930	5.836	1.00	0.00	AI
ATOM	213	CB	LEU	32	36.226	65.019	4.167	1.00	32.94	AI	ATOM	256	CA	LEU	36	29.647	65.157	6.144	1.00	40.25	AI
ATOM	214	CG	LEU	32	35.658	66.472	4.091	1.00	32.54	AI	ATOM	257	CB	LEU	36	30.070	65.899	4.889	1.00	39.03	AI

FIG. 5D

ATOM	258	CG	LEU	36	31.253	66.834	4.935	1.00	33.99	AI	ATOM	301	CA	LYS	41	23.112	63.885	6.029	1.00	50.48	AI
ATOM	259	CD1	LEU	36	31.438	67.404	3.571	1.00	32.08	AI	ATOM	302	CB	LYS	41	21.641	63.989	6.540	1.00	50.62	AI
ATOM	260	CD2	LEU	36	31.034	67.939	5.928	1.00	35.05	AI	ATOM	303	CG	LYS	41	21.387	63.326	7.911	1.00	52.11	AI
ATOM	261	C	LEU	36	28.332	64.414	5.941	1.00	41.90	AI	ATOM	304	CD	LYS	41	20.112	63.878	8.574	1.00	55.54	AI
ATOM	262	O	LEU	36	27.267	64.828	6.431	1.00	42.30	AI	ATOM	305	CE	LYS	41	19.578	63.087	9.820	1.00	58.79	AI
ATOM	263	N	CYS	37	28.392	63.251	5.309	1.00	42.63	AI	ATOM	306	NZ	LYS	41	18.374	63.648	10.457	1.00	58.31	AI
ATOM	264	H	CYS	37	29.250	62.904	5.020	1.00	0.00	AI	ATOM	307	HZ1	LYS	41	17.605	63.688	9.757	1.00	0.00	AI
ATOM	265	CA	CYS	37	27.216	62.469	5.084	1.00	43.53	AI	ATOM	308	HZ2	LYS	41	18.578	64.607	10.803	1.00	0.00	AI
ATOM	266	C	CYS	37	26.638	62.026	6.362	1.00	44.65	AI	ATOM	309	HZ3	LYS	41	18.084	63.043	11.252	1.00	0.00	AI
ATOM	267	O	CYS	37	25.426	61.997	6.459	1.00	46.40	AI	ATOM	310	C	LYS	41	23.251	64.318	4.588	1.00	49.92	AI
ATOM	268	CB	CYS	37	27.474	61.240	4.313	1.00	44.60	AI	ATOM	311	O	LYS	41	22.312	64.124	3.793	1.00	51.49	AI
ATOM	269	SG	CYS	37	26.133	60.038	4.530	1.00	43.86	AI	ATOM	312	N	LEU	42	24.432	64.893	4.246	1.00	48.28	AI
ATOM	270	N	ALA	38	27.465	61.734	7.342	1.00	45.96	AI	ATOM	313	H	LEU	42	25.103	65.050	4.937	1.00	0.00	AI
ATOM	271	H	ALA	38	28.433	61.707	7.202	1.00	0.00	AI	ATOM	314	CA	LEU	42	24.742	65.286	2.859	1.00	46.61	AI
ATOM	272	CA	ALA	38	26.932	61.261	8.592	1.00	48.03	AI	ATOM	315	CB	LEU	42	25.565	66.574	2.757	1.00	44.69	AI
ATOM	273	CB	ALA	38	27.869	60.140	9.108	1.00	48.64	AI	ATOM	316	CG	LEU	42	24.807	67.802	3.218	1.00	42.63	AI
ATOM	274	C	ALA	38	26.748	62.358	9.624	1.00	48.89	AI	ATOM	317	CD1	LEU	42	25.718	68.580	4.097	1.00	43.29	AI
ATOM	275	O	ALA	38	26.103	62.085	10.621	1.00	50.72	AI	ATOM	318	CD2	LEU	42	24.283	68.590	2.045	1.00	41.26	AI
ATOM	276	N	THR	39	27.256	63.590	9.512	1.00	50.66	AI	ATOM	319	C	LEU	42	25.580	64.124	2.397	1.00	45.46	AI
ATOM	277	H	THR	39	27.858	63.780	8.770	1.00	0.00	AI	ATOM	320	O	LEU	42	26.766	64.017	2.711	1.00	46.32	AI
ATOM	278	CA	THR	39	26.976	64.638	10.503	1.00	51.54	AI	ATOM	321	N	CYS	43	24.882	63.193	1.754	1.00	44.09	AI
ATOM	279	CG	THR	39	28.179	65.593	10.690	1.00	51.76	AI	ATOM	322	H	CYS	43	23.925	63.353	1.619	1.00	0.00	AI
ATOM	280	OG1	THR	39	29.294	64.826	11.126	1.00	52.65	AI	ATOM	323	CA	CYS	43	25.480	61.951	1.358	1.00	42.87	AI
ATOM	281	HG1	THR	39	29.749	64.481	10.355	1.00	0.00	AI	ATOM	324	C	CYS	43	25.448	61.846	-0.123	1.00	41.62	AI
ATOM	282	CG2	THR	39	27.900	66.655	11.729	1.00	51.62	AI	ATOM	325	O	CYS	43	25.762	60.805	-0.666	1.00	41.99	AI
ATOM	283	C	THR	39	25.775	65.466	10.037	1.00	52.17	AI	ATOM	326	CB	CYS	43	24.716	60.796	2.026	1.00	41.77	AI
ATOM	284	O	THR	39	24.886	65.882	10.781	1.00	52.15	AI	ATOM	327	SG	CYS	43	24.523	61.011	3.835	1.00	45.91	AI
ATOM	285	N	TYR	40	25.751	65.720	8.738	1.00	52.83	AI	ATOM	328	N	HIS	44	25.057	62.846	-0.882	1.00	42.90	AI
ATOM	286	H	TYR	40	26.420	65.331	8.139	1.00	0.00	AI	ATOM	329	H	HIS	44	24.841	63.721	-0.491	1.00	0.00	AI
ATOM	287	CA	TYR	40	24.729	66.561	8.165	1.00	52.53	AI	ATOM	330	CA	HIS	44	25.069	62.680	-2.320	1.00	44.60	AI
ATOM	288	CB	TYR	40	25.314	67.872	7.696	1.00	52.15	AI	ATOM	331	CB	HIS	44	23.653	62.264	-2.825	1.00	48.40	AI
ATOM	289	CG	TYR	40	26.399	68.458	8.552	1.00	54.11	AI	ATOM	332	CG	HIS	44	23.085	60.935	-2.310	1.00	50.37	AI
ATOM	290	CD1	TYR	40	27.678	68.341	8.062	1.00	56.50	AI	ATOM	333	CD2	HIS	44	22.178	60.844	-1.272	1.00	50.52	AI
ATOM	291	CE1	TYR	40	28.719	68.934	8.724	1.00	58.28	AI	ATOM	334	ND1	HIS	44	23.358	59.689	-2.713	1.00	52.28	AI
ATOM	292	CD2	TYR	40	26.122	69.144	9.714	1.00	54.86	AI	ATOM	335	HD1	HIS	44	24.130	59.394	-3.251	1.00	0.00	AI
ATOM	293	CE2	TYR	40	27.170	69.746	10.378	1.00	56.20	AI	ATOM	336	CE1	HIS	44	22.652	58.873	-1.955	1.00	51.92	AI
ATOM	294	CZ	TYR	40	28.453	69.642	9.872	1.00	58.26	AI	ATOM	337	NE2	HIS	44	21.947	59.565	-1.091	1.00	50.53	AI
ATOM	295	OH	TYR	40	29.513	70.310	10.463	1.00	61.00	AI	ATOM	338	HE2	HIS	44	21.290	59.189	-0.466	1.00	0.00	AI
ATOM	296	HH	TYR	40	30.179	70.443	9.782	1.00	0.00	AI	ATOM	339	C	HIS	44	25.522	63.941	-3.047	1.00	43.69	AI
ATOM	297	C	TYR	40	24.035	65.911	6.981	1.00	51.75	AI	ATOM	340	O	HIS	44	24.765	64.906	-3.108	1.00	43.00	AI
ATOM	298	O	TYR	40	23.662	66.578	6.024	1.00	52.52	AI	ATOM	341	N	PRO	45	26.710	63.978	-3.667	1.00	43.07	AI
ATOM	299	N	LYS	41	23.941	64.600	6.965	1.00	50.54	AI	ATOM	342	CD	PRO	45	27.785	62.995	-3.501	1.00	42.17	AI
ATOM	300	H	LYS	41	24.474	64.064	7.583	1.00	0.00	AI	ATOM	343	CA	PRO	45	27.133	65.024	-4.570	1.00	42.50	AI

FIG. 5E

ATOM	344	CB	PRO	45	28.380	64.466	-5.217	1.00	39.76	AI	ATOM	387	CA	LEU	50	22.908	72.895	-8.729	1.00	46.03	AI
ATOM	345	CG	PRO	45	28.995	63.680	-4.123	1.00	39.09	AI	ATOM	388	CB	LEU	50	21.469	72.769	-8.264	1.00	46.43	AI
ATOM	346	C	PRO	45	26.071	65.423	-5.585	1.00	44.49	AI	ATOM	389	CG	LEU	50	20.443	73.718	-8.760	1.00	44.16	AI
ATOM	347	O	PRO	45	25.876	66.612	-5.801	1.00	45.36	AI	ATOM	390	CD1	LEU	50	20.259	73.558	-10.243	1.00	44.79	AI
ATOM	348	N	GLU	46	25.334	64.501	-6.225	1.00	45.36	AI	ATOM	391	CD2	LEU	50	19.159	73.400	-8.079	1.00	44.66	AI
ATOM	349	H	GLU	46	25.464	63.561	-5.996	1.00	0.00	AI	ATOM	392	C	LEU	50	23.632	73.968	-7.917	1.00	45.85	AI
ATOM	350	CA	GLU	46	24.406	64.806	-7.319	1.00	45.46	AI	ATOM	393	O	LEU	50	23.996	74.989	-8.484	1.00	44.52	AI
ATOM	351	CB	GLU	46	23.952	63.515	-7.997	1.00	50.54	AI	ATOM	394	N	LEU	51	23.853	73.764	-6.606	1.00	45.44	AI
ATOM	352	CG	GLU	46	24.462	63.460	-9.445	1.00	58.48	AI	ATOM	395	H	LEU	51	23.489	72.958	-6.189	1.00	0.00	AI
ATOM	353	CD	GLU	46	23.637	64.215	-10.502	1.00	64.93	AI	ATOM	396	CA	LEU	51	24.676	74.656	-5.805	1.00	46.04	AI
ATOM	354	OE1	GLU	46	23.642	65.455	-10.516	1.00	68.55	AI	ATOM	397	CB	LEU	51	24.860	74.084	-4.435	1.00	45.53	AI
ATOM	355	OE2	GLU	46	22.995	63.554	-11.332	1.00	68.31	AI	ATOM	398	CG	LEU	51	25.741	74.931	-3.535	1.00	47.78	AI
ATOM	356	C	GLU	46	23.181	65.584	-6.937	1.00	42.96	AI	ATOM	399	CD1	LEU	51	25.148	76.320	-3.322	1.00	47.13	AI
ATOM	357	O	GLU	46	22.532	66.223	-7.748	1.00	41.71	AI	ATOM	400	CD2	LEU	51	25.902	74.202	-2.219	1.00	48.33	AI
ATOM	358	N	GLU	47	22.919	65.563	-5.654	1.00	41.96	AI	ATOM	401	C	LEU	51	26.064	74.845	-6.436	1.00	46.27	AI
ATOM	359	H	GLU	47	23.507	65.098	-5.028	1.00	0.00	AI	ATOM	402	O	LEU	51	26.551	75.966	-6.612	1.00	47.62	AI
ATOM	360	CA	GLU	47	21.818	66.301	-5.144	1.00	43.21	AI	ATOM	403	N	GLY	52	26.702	73.736	-6.809	1.00	44.84	AI
ATOM	361	CB	GLU	47	21.294	65.487	-3.963	1.00	43.24	AI	ATOM	404	H	GLY	52	26.306	72.869	-6.578	1.00	0.00	AI
ATOM	362	CG	GLU	47	21.409	65.925	-2.515	1.00	46.07	AI	ATOM	405	CA	GLY	52	27.989	73.758	-7.453	1.00	42.91	AI
ATOM	363	CD	GLU	47	20.812	64.907	-1.547	1.00	47.86	AI	ATOM	406	C	GLY	52	27.984	74.533	-8.750	1.00	42.47	AI
ATOM	364	OE1	GLU	47	19.847	64.225	-1.910	1.00	50.99	AI	ATOM	407	O	GLY	52	28.853	75.364	-8.983	1.00	42.06	AI
ATOM	365	OE2	GLU	47	21.313	64.780	-0.427	1.00	49.47	AI	ATOM	408	N	HIS	53	27.047	74.307	-9.653	1.00	42.02	AI
ATOM	366	C	GLU	47	22.295	67.718	-4.809	1.00	44.04	AI	ATOM	409	H	HIS	53	26.366	73.624	-9.471	1.00	0.00	AI
ATOM	367	O	GLU	47	21.532	68.547	-4.292	1.00	44.60	AI	ATOM	410	CA	HIS	53	27.009	75.104	-10.861	1.00	42.23	AI
ATOM	368	N	LEU	48	23.567	68.015	-5.121	1.00	43.05	AI	ATOM	411	CB	HIS	53	25.842	74.689	-11.706	1.00	42.21	AI
ATOM	369	H	LEU	48	24.140	67.310	-5.465	1.00	0.00	AI	ATOM	412	CG	HIS	53	26.076	73.399	-12.460	1.00	44.60	AI
ATOM	370	CA	LEU	48	24.166	69.318	-4.904	1.00	42.42	AI	ATOM	413	CD2	HIS	53	25.112	72.774	-13.200	1.00	47.49	AI
ATOM	371	CB	LEU	48	25.223	69.201	-3.858	1.00	40.53	AI	ATOM	414	ND1	HIS	53	27.180	72.669	-12.578	1.00	46.76	AI
ATOM	372	CG	LEU	48	24.920	68.695	-2.489	1.00	41.87	AI	ATOM	415	HD1	HIS	53	28.039	72.853	-12.139	1.00	0.00	AI
ATOM	373	CD1	LEU	48	26.277	68.424	-1.892	1.00	41.71	AI	ATOM	416	CE1	HIS	53	26.954	71.641	-13.346	1.00	46.90	AI
ATOM	374	CD2	LEU	48	24.096	69.670	-1.633	1.00	41.13	AI	ATOM	417	NE2	HIS	53	25.704	71.725	-13.707	1.00	50.22	AI
ATOM	375	C	LEU	48	24.792	69.937	-6.166	1.00	42.37	AI	ATOM	418	HE2	HIS	53	25.237	71.033	-14.239	1.00	0.00	AI
ATOM	376	O	LEU	48	25.439	70.994	-6.098	1.00	42.37	AI	ATOM	419	C	HIS	53	26.893	76.585	-10.536	1.00	42.72	AI
ATOM	377	N	VAL	49	24.566	69.366	-7.347	1.00	41.52	AI	ATOM	420	O	HIS	53	27.622	77.399	-11.068	1.00	42.03	AI
ATOM	378	H	VAL	49	23.951	68.602	-7.362	1.00	0.00	AI	ATOM	421	N	SER	54	26.099	76.920	-9.535	1.00	45.08	AI
ATOM	379	CA	VAL	49	25.191	69.822	-8.578	1.00	43.34	AI	ATOM	422	H	SER	54	25.673	76.218	-9.001	1.00	0.00	AI
ATOM	380	CB	VAL	49	24.890	68.761	-9.636	1.00	44.29	AI	ATOM	423	CA	SER	54	25.792	78.278	-9.177	1.00	46.92	AI
ATOM	381	CG1	VAL	49	23.381	68.709	-9.830	1.00	47.50	AI	ATOM	424	CB	SER	54	24.576	78.181	-8.289	1.00	48.86	AI
ATOM	382	CG2	VAL	49	25.540	69.086	-10.975	1.00	45.25	AI	ATOM	425	OG	SER	54	23.521	77.616	-9.112	1.00	53.06	AI
ATOM	383	C	VAL	49	24.740	71.214	-9.028	1.00	44.98	AI	ATOM	426	HG	SER	54	23.465	76.677	-8.918	1.00	0.00	AI
ATOM	384	O	VAL	49	25.401	71.901	-9.814	1.00	46.03	AI	ATOM	427	C	SER	54	26.939	79.033	-8.549	1.00	47.92	AI
ATOM	385	N	LEU	50	23.565	71.602	-8.530	1.00	46.16	AI	ATOM	428	O	SER	54	27.038	80.264	-8.655	1.00	49.60	AI
ATOM	386	H	LEU	50	23.081	70.933	-8.006	1.00	0.00	AI	ATOM	429	N	LEU	55	27.837	78.273	-7.933	1.00	47.59	AI

FIG. 5F

ATOM 430	H LEU 55	27.638	77.322	-7.791	1.00	0.00	A1	ATOM 473	C TRP 59	38.815	71.435	-12.256	1.00	52.84	A1
ATOM 431	CA LEU 55	29.075	78.810	-7.401	1.00	45.27	A1	ATOM 474	O TRP 59	38.842	71.972	-13.372	1.00	54.96	A1
ATOM 432	CB LEU 55	29.552	77.913	-6.243	1.00	45.49	A1	ATOM 475	N ALA 60	39.912	70.834	-11.777	1.00	51.97	A1
ATOM 433	CG LEU 55	28.840	77.992	-4.874	1.00	47.30	A1	ATOM 476	H ALA 60	39.857	70.269	-10.977	1.00	0.00	A1
ATOM 434	CD1 LEU 55	28.876	76.596	-4.299	1.00	49.52	A1	ATOM 477	CA ALA 60	41.108	70.870	-12.609	1.00	52.18	A1
ATOM 435	CD2 LEU 55	29.530	78.921	-3.862	1.00	45.69	A1	ATOM 478	CB ALA 60	42.303	70.610	-11.748	1.00	51.75	A1
ATOM 436	C LEU 55	30.133	78.889	-8.492	1.00	43.63	A1	ATOM 479	C ALA 60	41.055	69.857	-13.746	1.00	52.16	A1
ATOM 437	O LEU 55	31.247	79.350	-8.272	1.00	43.24	A1	ATOM 480	O ALA 60	40.545	68.760	-13.530	1.00	52.17	A1
ATOM 438	N GLY 56	29.855	78.383	-9.675	1.00	43.55	A1	ATOM 481	N PRO 61	41.435	70.145	-14.986	1.00	53.34	A1
ATOM 439	H GLY 56	28.984	77.975	-9.828	1.00	0.00	A1	ATOM 482	CD PRO 61	41.370	71.458	-15.622	1.00	54.76	A1
ATOM 440	CA GLY 56	30.814	78.390	-10.753	1.00	45.59	A1	ATOM 483	CA PRO 61	41.691	69.145	-15.993	1.00	55.57	A1
ATOM 441	C GLY 56	32.182	77.811	-10.392	1.00	46.76	A1	ATOM 484	CB PRO 61	41.792	69.918	-17.310	1.00	54.95	A1
ATOM 442	O GLY 56	33.171	78.213	-11.015	1.00	47.31	A1	ATOM 485	CG PRO 61	42.211	71.297	-16.901	1.00	54.05	A1
ATOM 443	N ILE 57	32.247	76.885	-9.412	1.00	47.49	A1	ATOM 486	C PRO 61	42.934	68.333	-15.690	1.00	57.54	A1
ATOM 444	H ILE 57	31.392	76.594	-9.042	1.00	0.00	A1	ATOM 487	O PRO 61	43.757	68.661	-14.834	1.00	57.20	A1
ATOM 445	CA ILE 57	33.486	76.249	-8.950	1.00	48.28	A1	ATOM 488	N LEU 62	43.040	67.271	-16.486	1.00	59.98	A1
ATOM 446	CB ILE 57	33.144	75.172	-7.863	1.00	47.79	A1	ATOM 489	H LEU 62	42.285	67.067	-17.077	1.00	0.00	A1
ATOM 447	CG ILE 57	34.457	74.591	-7.348	1.00	46.85	A1	ATOM 490	CA LEU 62	44.184	66.370	-16.471	1.00	63.64	A1
ATOM 448	CG1 ILE 57	32.338	75.764	-6.701	1.00	45.09	A1	ATOM 491	CB LEU 62	44.062	65.417	-15.260	1.00	63.72	A1
ATOM 449	CD ILE 57	31.859	74.739	-5.659	1.00	41.23	A1	ATOM 492	CG LEU 62	45.323	64.691	-14.865	1.00	64.43	A1
ATOM 450	C ILE 57	34.276	75.602	-10.115	1.00	49.15	A1	ATOM 493	CD1 LEU 62	46.394	65.704	-14.488	1.00	64.02	A1
ATOM 451	O ILE 57	33.678	74.935	-10.968	1.00	49.04	A1	ATOM 494	CD2 LEU 62	45.016	63.764	-13.717	1.00	64.98	A1
ATOM 452	N PRO 58	35.596	75.817	-10.248	1.00	49.75	A1	ATOM 495	C LEU 62	44.214	65.611	-17.812	1.00	65.69	A1
ATOM 453	CD PRO 58	36.402	76.743	-9.433	1.00	50.94	A1	ATOM 496	OT1 LEU 62	44.256	66.302	-18.844	1.00	68.47	A1
ATOM 454	CA PRO 58	36.421	75.228	-11.302	1.00	50.72	A1	ATOM 497	OT2 LEU 62	44.194	64.371	-17.845	1.00	66.57	A1
ATOM 455	CB PRO 58	37.525	76.241	-11.488	1.00	50.92	A1	ATOM 498	CB LEU 72	57.448	63.159	-19.422	1.00	63.44	A2
ATOM 456	CG PRO 58	37.814	76.663	-10.041	1.00	50.82	A1	ATOM 499	CG LEU 72	57.716	62.495	-18.117	1.00	63.40	A2
ATOM 457	C PRO 58	36.916	73.845	-10.875	1.00	50.36	A1	ATOM 500	CD1 LEU 72	56.719	61.408	-17.913	1.00	61.50	A2
ATOM 458	O PRO 58	37.187	73.599	-9.691	1.00	49.75	A1	ATOM 501	CD2 LEU 72	59.107	61.901	-18.121	1.00	63.22	A2
ATOM 459	N TRP 59	37.030	72.927	-11.816	1.00	50.37	A1	ATOM 502	C LEU 72	55.897	65.084	-18.876	1.00	65.40	A2
ATOM 460	H TRP 59	36.888	73.141	-12.760	1.00	0.00	A1	ATOM 503	O LEU 72	54.827	65.301	-18.316	1.00	67.30	A2
ATOM 461	CA TRP 59	37.524	71.595	-11.482	1.00	51.78	A1	ATOM 504	HT1 LEU 72	56.469	64.683	-21.261	1.00	0.00	A2
ATOM 462	CB TRP 59	36.435	70.562	-11.857	1.00	49.06	A1	ATOM 505	HT2 LEU 72	54.827	64.355	-20.951	1.00	0.00	A2
ATOM 463	CG TRP 59	35.254	70.712	-10.889	1.00	46.37	A1	ATOM 506	N LEU 72	55.795	63.983	-20.899	1.00	66.29	A2
ATOM 464	CD2 TRP 59	35.320	70.845	-9.521	1.00	44.06	A1	ATOM 507	HT3 LEU 72	55.866	63.098	-21.439	1.00	0.00	A2
ATOM 465	CE2 TRP 59	33.998	71.027	-9.205	1.00	44.18	A1	ATOM 508	CA LEU 72	56.064	63.714	-19.512	1.00	64.91	A2
ATOM 466	CE3 TRP 59	36.274	70.842	-8.538	1.00	44.03	A1	ATOM 509	N ALA 73	56.807	66.046	-19.086	1.00	64.54	A2
ATOM 467	CD1 TRP 59	33.972	70.794	-11.354	1.00	45.17	A1	ATOM 510	H ALA 73	57.690	65.804	-19.432	1.00	0.00	A2
ATOM 468	NE1 TRP 59	33.229	70.994	-10.297	1.00	43.17	A1	ATOM 511	CA ALA 73	56.707	67.433	-18.615	1.00	62.55	A2
ATOM 469	HE1 TRP 59	32.301	71.312	-10.332	1.00	0.00	A1	ATOM 512	CB ALA 73	57.553	68.314	-19.529	1.00	64.84	A2
ATOM 470	CZ2 TRP 59	33.598	71.215	-7.916	1.00	45.60	A1	ATOM 513	C ALA 73	55.319	68.024	-18.539	1.00	60.37	A2
ATOM 471	CZ3 TRP 59	35.893	71.028	-7.243	1.00	45.25	A1	ATOM 514	O ALA 73	54.801	68.180	-17.456	1.00	59.42	A2
ATOM 472	CH2 TRP 59	34.565	71.214	-6.938	1.00	46.43	A1	ATOM 515	N GLY 74	54.693	68.226	-19.691	1.00	59.72	A2

FIG. 5G

ATOM	516 H	GLY	74	55.212	68.174	-20.514	1.00	0.00	A2	ATOM	559 CB	LEU	79	49.617	66.015	-12.259	1.00	45.06	A2
ATOM	517 CA	GLY	74	53.336	68.728	-19.816	1.00	59.99	A2	ATOM	560 CG	LEU	79	49.154	64.895	-11.351	1.00	45.18	A2
ATOM	518 C	GLY	74	52.327	68.114	-18.865	1.00	60.27	A2	ATOM	561 CD	LEU	79	49.634	63.594	-11.957	1.00	48.06	A2
ATOM	519 O	GLY	74	51.880	68.796	-17.935	1.00	60.80	A2	ATOM	562 CD	LEU	79	49.766	64.986	-9.969	1.00	46.03	A2
ATOM	520 N	CYS	75	51.945	66.850	-19.030	1.00	59.60	A2	ATOM	563 C	LEU	79	49.366	68.265	-11.170	1.00	43.49	A2
ATOM	521 H	CYS	75	52.160	66.358	-19.839	1.00	0.00	A2	ATOM	564 O	LEU	79	48.645	68.509	-10.199	1.00	43.20	A2
ATOM	522 CA	CYS	75	51.002	66.276	-18.078	1.00	60.17	A2	ATOM	565 N	HIS	80	50.556	68.834	-11.329	1.00	43.83	A2
ATOM	523 CB	CYS	75	50.670	64.801	-18.464	1.00	64.08	A2	ATOM	566 H	HIS	80	51.115	68.548	-12.085	1.00	0.00	A2
ATOM	524 SG	CYS	75	49.832	64.732	-20.096	1.00	73.47	A2	ATOM	567 CA	HIS	80	51.060	69.788	-10.360	1.00	43.79	A2
ATOM	525 C	CYS	75	51.502	66.346	-16.642	1.00	56.73	A2	ATOM	568 CB	HIS	80	52.456	70.221	-10.810	1.00	43.58	A2
ATOM	526 O	CYS	75	50.734	66.748	-15.765	1.00	55.82	A2	ATOM	569 CG	HIS	80	53.030	71.031	-9.690	1.00	43.75	A2
ATOM	527 N	LEU	76	52.795	66.142	-16.396	1.00	53.93	A2	ATOM	570 CD	HIS	80	53.484	70.497	-8.517	1.00	47.48	A2
ATOM	528 H	LEU	76	53.423	66.043	-17.137	1.00	0.00	A2	ATOM	571 ND	HIS	80	53.083	72.343	-9.567	1.00	44.24	A2
ATOM	529 CA	LEU	76	53.325	66.156	-15.044	1.00	52.94	A2	ATOM	572 HD	HIS	80	52.842	73.004	-10.255	1.00	0.00	A2
ATOM	530 CB	LEU	76	54.798	65.754	-15.181	1.00	50.81	A2	ATOM	573 CE	HIS	80	53.530	72.641	-8.376	1.00	44.47	A2
ATOM	531 CG	LEU	76	55.575	65.011	-14.090	1.00	49.02	A2	ATOM	574 NE	HIS	80	53.772	71.520	-7.748	1.00	48.16	A2
ATOM	532 CD	LEU	76	54.852	63.740	-13.698	1.00	46.76	A2	ATOM	575 HE	HIS	80	54.103	71.444	-6.824	1.00	0.00	A2
ATOM	533 CD	LEU	76	56.951	64.633	-14.623	1.00	47.67	A2	ATOM	576 C	HIS	80	50.094	70.978	-10.229	1.00	44.40	A2
ATOM	534 C	LEU	76	53.093	67.545	-14.425	1.00	53.65	A2	ATOM	577 O	HIS	80	49.643	71.294	-9.131	1.00	44.28	A2
ATOM	535 O	LEU	76	52.731	67.716	-13.244	1.00	53.50	A2	ATOM	578 N	SER	81	49.733	71.670	-11.309	1.00	45.13	A2
ATOM	536 N	SER	77	53.137	68.553	-15.301	1.00	53.91	A2	ATOM	579 H	SER	81	50.136	71.459	-12.176	1.00	0.00	A2
ATOM	537 H	SER	77	53.322	68.361	-16.242	1.00	0.00	A2	ATOM	580 CA	SER	81	48.738	72.742	-11.296	1.00	45.41	A2
ATOM	538 CA	SER	77	52.882	69.932	-14.942	1.00	54.93	A2	ATOM	581 CB	SER	81	48.612	73.347	-12.682	1.00	45.59	A2
ATOM	539 CB	SER	77	53.425	70.835	-16.040	1.00	58.32	A2	ATOM	582 OG	SER	81	49.894	73.444	-13.292	1.00	49.27	A2
ATOM	540 OG	SER	77	54.806	70.587	-16.310	1.00	63.35	A2	ATOM	583 HG	SER	81	50.058	72.670	-13.843	1.00	0.00	A2
ATOM	541 HG	SER	77	54.949	69.637	-16.315	1.00	0.00	A2	ATOM	584 C	SER	81	47.344	72.266	-10.856	1.00	44.85	A2
ATOM	542 C	SER	77	51.382	70.172	-14.759	1.00	53.47	A2	ATOM	585 O	SER	81	46.604	73.064	-10.256	1.00	46.83	A2
ATOM	543 O	SER	77	50.982	70.965	-13.899	1.00	53.54	A2	ATOM	586 N	GLY	82	46.946	71.010	-11.092	1.00	42.16	A2
ATOM	544 N	GLN	78	50.509	69.501	-15.512	1.00	51.82	A2	ATOM	587 H	GLY	82	47.513	70.411	-11.614	1.00	0.00	A2
ATOM	545 H	GLN	78	50.857	68.901	-16.207	1.00	0.00	A2	ATOM	588 CA	GLY	82	45.663	70.500	-10.650	1.00	39.39	A2
ATOM	546 CA	GLN	78	49.074	69.619	-15.349	1.00	50.74	A2	ATOM	589 C	GLY	82	45.569	70.461	-9.139	1.00	39.30	A2
ATOM	547 CB	GLN	78	48.402	68.877	-16.451	1.00	54.31	A2	ATOM	590 O	GLY	82	44.542	70.843	-8.544	1.00	39.64	A2
ATOM	548 CG	GLN	78	47.420	69.784	-17.160	1.00	58.59	A2	ATOM	591 N	LEU	83	46.676	70.032	-8.521	1.00	37.57	A2
ATOM	549 CD	GLN	78	46.557	68.940	-18.071	1.00	62.32	A2	ATOM	592 H	LEU	83	47.413	69.695	-9.075	1.00	0.00	A2
ATOM	550 OE	GLN	78	47.005	68.260	-18.998	1.00	65.94	A2	ATOM	593 CA	LEU	83	46.826	70.007	-7.057	1.00	38.07	A2
ATOM	551 NE	GLN	78	45.269	68.889	-17.800	1.00	63.17	A2	ATOM	594 CB	LEU	83	48.133	69.202	-6.748	1.00	35.67	A2
ATOM	552 HE	GLN	78	44.973	69.327	-16.972	1.00	0.00	A2	ATOM	595 CG	LEU	83	48.071	67.736	-7.225	1.00	32.51	A2
ATOM	553 HE	GLN	78	44.704	68.444	-18.456	1.00	0.00	A2	ATOM	596 CD	LEU	83	49.442	67.145	-7.319	1.00	29.77	A2
ATOM	554 C	GLN	78	48.591	69.065	-14.011	1.00	48.17	A2	ATOM	597 CD	LEU	83	47.180	66.973	-6.288	1.00	28.71	A2
ATOM	555 O	GLN	78	47.691	69.618	-13.368	1.00	46.31	A2	ATOM	598 C	LEU	83	46.836	71.386	-6.354	1.00	38.48	A2
ATOM	556 N	LEU	79	49.236	67.988	-13.564	1.00	45.89	A2	ATOM	599 O	LEU	83	46.392	71.627	-5.219	1.00	38.05	A2
ATOM	557 H	LEU	79	49.920	67.584	-14.140	1.00	0.00	A2	ATOM	600 N	PHE	84	47.366	72.338	-7.108	1.00	40.34	A2
ATOM	558 CA	LEU	79	48.919	67.359	-12.294	1.00	44.54	A2	ATOM	601 H	PHE	84	47.804	72.078	-7.944	1.00	0.00	A2

FIG. 5H

ATOM	602	CA	PHE	84	47.414	73.703	-6.688	1.00	41.54	A2	ATOM	645	C	GLN	87	43.941	74.652	-2.013	1.00	34.36	A2
ATOM	603	CB	PHE	84	48.163	74.531	-7.693	1.00	46.88	A2	ATOM	646	O	GLN	87	43.414	74.990	-0.935	1.00	31.55	A2
ATOM	604	CG	PHE	84	48.715	75.777	-6.988	1.00	55.09	A2	ATOM	647	N	GLY	88	43.740	75.335	-3.159	1.00	32.73	A2
ATOM	605	CD1	PHE	84	49.521	75.622	-5.849	1.00	55.31	A2	ATOM	648	H	GLY	88	44.165	75.005	-3.981	1.00	0.00	A2
ATOM	606	CD2	PHE	84	48.396	77.053	-7.469	1.00	55.79	A2	ATOM	649	CA	GLY	88	42.948	76.546	-3.232	1.00	30.81	A2
ATOM	607	CE1	PHE	84	50.004	76.737	-5.195	1.00	57.60	A2	ATOM	650	C	GLY	88	41.540	76.275	-2.731	1.00	30.47	A2
ATOM	608	CE2	PHE	84	48.892	78.156	-6.796	1.00	57.25	A2	ATOM	651	O	GLY	88	41.130	76.819	-1.703	1.00	30.27	A2
ATOM	609	CZ	PHE	84	49.688	78.002	-5.667	1.00	58.34	A2	ATOM	652	N	LEU	89	40.802	75.387	-3.406	1.00	29.01	A2
ATOM	610	C	PHE	84	45.994	74.191	-6.591	1.00	40.47	A2	ATOM	653	H	LEU	89	41.220	74.912	-4.154	1.00	0.00	A2
ATOM	611	O	PHE	84	45.609	74.749	-5.558	1.00	42.71	A2	ATOM	654	CA	LEU	89	39.447	75.102	-3.009	1.00	27.60	A2
ATOM	612	N	LEU	85	45.190	73.953	-7.624	1.00	38.64	A2	ATOM	655	CB	LEU	89	38.922	74.073	-3.935	1.00	28.13	A2
ATOM	613	H	LEU	85	45.555	73.527	-8.429	1.00	0.00	A2	ATOM	656	CG	LEU	89	38.764	74.583	-5.340	1.00	29.51	A2
ATOM	614	CA	LEU	85	43.794	74.335	-7.584	1.00	38.81	A2	ATOM	657	CD1	LEU	89	38.363	73.530	-6.364	1.00	24.13	A2
ATOM	615	CB	LEU	85	43.101	73.886	-8.839	1.00	41.27	A2	ATOM	658	CD2	LEU	89	37.673	75.637	-5.220	1.00	32.87	A2
ATOM	616	CG	LEU	85	41.673	74.403	-9.017	1.00	46.45	A2	ATOM	659	C	LEU	89	39.352	74.629	-1.583	1.00	29.88	A2
ATOM	617	CD1	LEU	85	41.702	75.784	-9.719	1.00	47.80	A2	ATOM	660	O	LEU	89	38.427	75.012	-0.860	1.00	30.81	A2
ATOM	618	CD2	LEU	85	40.860	73.359	-9.787	1.00	48.25	A2	ATOM	661	N	LEU	90	40.317	73.839	-1.094	1.00	32.59	A2
ATOM	619	C	LEU	85	43.079	73.731	-6.386	1.00	38.20	A2	ATOM	662	H	LEU	90	41.101	73.626	-1.643	1.00	0.00	A2
ATOM	620	O	LEU	85	42.498	74.469	-5.582	1.00	38.36	A2	ATOM	663	CA	LEU	90	40.182	73.274	0.235	1.00	33.41	A2
ATOM	621	N	TYR	86	43.150	72.405	-6.198	1.00	37.92	A2	ATOM	664	CB	LEU	90	41.207	72.234	0.503	1.00	36.15	A2
ATOM	622	H	TYR	86	43.637	71.850	-6.845	1.00	0.00	A2	ATOM	665	CG	LEU	90	41.075	70.971	-0.343	1.00	38.76	A2
ATOM	623	CA	TYR	86	42.501	71.801	-5.057	1.00	37.15	A2	ATOM	666	CD1	LEU	90	42.431	70.267	-0.456	1.00	37.21	A2
ATOM	624	CB	TYR	86	42.598	70.255	-5.102	1.00	36.73	A2	ATOM	667	CD2	LEU	90	39.995	70.099	0.279	1.00	40.54	A2
ATOM	625	CG	TYR	86	41.561	69.685	-6.081	1.00	33.66	A2	ATOM	668	C	LEU	90	40.342	74.319	1.255	1.00	34.24	A2
ATOM	626	CD1	TYR	86	41.946	69.312	-7.374	1.00	30.03	A2	ATOM	669	O	LEU	90	39.711	74.256	2.313	1.00	35.57	A2
ATOM	627	CE1	TYR	86	40.991	68.885	-8.280	1.00	30.08	A2	ATOM	670	N	GLN	91	41.188	75.291	0.940	1.00	35.24	A2
ATOM	628	CD2	TYR	86	40.224	69.623	-5.666	1.00	32.61	A2	ATOM	671	H	GLN	91	41.663	75.284	0.078	1.00	0.00	A2
ATOM	629	CE2	TYR	86	39.263	69.203	-6.574	1.00	31.66	A2	ATOM	672	CA	GLN	91	41.397	76.373	1.883	1.00	37.60	A2
ATOM	630	CZ	TYR	86	39.656	68.838	-7.868	1.00	30.57	A2	ATOM	673	CB	GLN	91	42.557	77.182	1.363	1.00	39.65	A2
ATOM	631	OH	TYR	86	38.670	68.428	-8.751	1.00	28.18	A2	ATOM	674	CG	GLN	91	43.155	78.237	2.284	1.00	44.32	A2
ATOM	632	HH	TYR	86	39.107	67.994	-9.485	1.00	0.00	A2	ATOM	675	CD	GLN	91	44.348	78.799	1.542	1.00	46.96	A2
ATOM	633	C	TYR	86	43.054	72.318	-3.746	1.00	37.75	A2	ATOM	676	OE1	GLN	91	45.235	78.083	1.068	1.00	47.42	A2
ATOM	634	O	TYR	86	42.173	72.469	-2.889	1.00	39.52	A2	ATOM	677	NE2	GLN	91	44.376	80.092	1.341	1.00	46.82	A2
ATOM	635	N	GLN	87	44.347	72.655	-3.478	1.00	36.93	A2	ATOM	678	HE21	GLN	91	43.690	80.685	1.700	1.00	0.00	A2
ATOM	636	H	GLN	87	45.044	72.463	-4.140	1.00	0.00	A2	ATOM	679	HE22	GLN	91	45.108	80.331	0.741	1.00	0.00	A2
ATOM	637	CA	GLN	87	44.749	73.332	-2.205	1.00	36.40	A2	ATOM	680	C	GLN	91	40.129	77.231	2.061	1.00	37.22	A2
ATOM	638	CB	GLN	87	46.210	73.668	-2.255	1.00	39.56	A2	ATOM	681	O	GLN	91	39.718	77.530	3.186	1.00	36.21	A2
ATOM	639	CG	GLN	87	47.126	72.993	-1.237	1.00	46.99	A2	ATOM	682	N	ALA	92	39.456	77.570	0.943	1.00	38.63	A2
ATOM	640	CD	GLN	87	48.641	73.062	-1.576	1.00	50.96	A2	ATOM	683	H	ALA	92	39.808	77.205	0.098	1.00	0.00	A2
ATOM	641	OE1	GLN	87	49.144	72.623	-2.627	1.00	52.15	A2	ATOM	684	CA	ALA	92	38.243	78.402	0.880	1.00	38.10	A2
ATOM	642	NE2	GLN	87	49.446	73.608	-0.663	1.00	52.96	A2	ATOM	685	CB	ALA	92	37.657	78.436	-0.511	1.00	36.76	A2
ATOM	643	HE21	GLN	87	49.055	73.957	0.164	1.00	0.00	A2	ATOM	686	C	ALA	92	37.139	77.905	1.770	1.00	38.95	A2
ATOM	644	HE22	GLN	87	50.396	73.621	-0.888	1.00	0.00	A2	ATOM	687	O	ALA	92	36.294	78.687	2.194	1.00	42.45	A2

FIG. 51

ATOM 688 N LEU 93	37.151	76.618	2.123	1.00	38.34	A2	ATOM 731 CA PRO 98	35.195	73.200	14.257	1.00	54.94	A2
ATOM 689 H LEU 93	37.855	76.040	1.759	1.00	0.00	A2	ATOM 732 CB PRO 98	34.750	73.717	15.600	1.00	54.78	A2
ATOM 690 CA LEU 93	36.111	76.018	2.972	1.00	36.90	A2	ATOM 733 CG PRO 98	33.772	74.777	15.182	1.00	55.48	A2
ATOM 691 CB LEU 93	36.088	74.463	2.794	1.00	35.34	A2	ATOM 734 C PRO 98	35.591	71.723	14.336	1.00	56.75	A2
ATOM 692 CG LEU 93	35.725	73.992	1.378	1.00	33.55	A2	ATOM 735 O PRO 98	36.738	71.274	14.468	1.00	57.85	A2
ATOM 693 CD1 LEU 93	36.159	72.583	1.129	1.00	33.26	A2	ATOM 736 N GLU 99	34.509	70.971	14.214	1.00	58.21	A2
ATOM 694 CD2 LEU 93	34.254	74.167	1.215	1.00	32.18	A2	ATOM 737 H GLU 99	33.652	71.400	14.028	1.00	0.00	A2
ATOM 695 C LEU 93	36.264	76.353	4.426	1.00	36.44	A2	ATOM 738 CA GLU 99	34.543	69.537	14.281	1.00	58.48	A2
ATOM 696 O LEU 93	35.473	75.917	5.256	1.00	35.17	A2	ATOM 739 CB GLU 99	33.111	69.104	14.304	1.00	63.30	A2
ATOM 697 N GLU 94	37.357	77.019	4.736	1.00	38.19	A2	ATOM 740 CG GLU 99	32.958	67.702	14.852	1.00	71.04	A2
ATOM 698 H GLU 94	38.022	77.167	4.035	1.00	0.00	A2	ATOM 741 CD GLU 99	32.076	66.838	13.962	1.00	76.95	A2
ATOM 699 CA GLU 94	37.627	77.573	6.038	1.00	42.71	A2	ATOM 742 OE1 GLU 99	32.209	65.608	14.079	1.00	80.63	A2
ATOM 700 CB GLU 94	36.931	78.947	6.165	1.00	47.38	A2	ATOM 743 OE2 GLU 99	31.295	67.382	13.153	1.00	77.99	A2
ATOM 701 CG GLU 94	37.418	80.011	5.131	1.00	56.10	A2	ATOM 744 C GLU 99	35.298	69.025	13.074	1.00	55.31	A2
ATOM 702 CD GLU 94	36.423	81.153	4.862	1.00	60.26	A2	ATOM 745 O GLU 99	36.251	68.270	13.210	1.00	55.96	A2
ATOM 703 OE1 GLU 94	35.728	81.109	3.823	1.00	60.76	A2	ATOM 746 N LEU 100	34.916	69.475	11.891	1.00	51.23	A2
ATOM 704 OE2 GLU 94	36.331	82.054	5.721	1.00	61.64	A2	ATOM 747 H LEU 100	34.214	70.159	11.841	1.00	0.00	A2
ATOM 705 C GLU 94	37.245	76.701	7.198	1.00	43.90	A2	ATOM 748 CA LEU 100	35.577	69.052	10.678	1.00	48.08	A2
ATOM 706 O GLU 94	36.624	77.172	8.167	1.00	45.70	A2	ATOM 749 CB LEU 100	34.627	69.341	9.574	1.00	45.52	A2
ATOM 707 N GLY 95	37.641	75.410	7.001	1.00	44.03	A2	ATOM 750 CG LEU 100	33.544	68.337	9.674	1.00	45.39	A2
ATOM 708 H GLY 95	38.024	75.192	6.127	1.00	0.00	A2	ATOM 751 CD1 LEU 100	32.207	68.972	9.458	1.00	46.40	A2
ATOM 709 CA GLY 95	37.519	74.310	7.981	1.00	42.49	A2	ATOM 752 CD2 LEU 100	33.851	67.245	8.677	1.00	47.48	A2
ATOM 710 C GLY 95	36.162	73.612	8.061	1.00	42.24	A2	ATOM 753 C LEU 100	36.956	69.629	10.368	1.00	46.77	A2
ATOM 711 O GLY 95	36.028	72.596	8.739	1.00	40.02	A2	ATOM 754 O LEU 100	37.578	69.244	9.357	1.00	46.62	A2
ATOM 712 N ILE 96	35.160	74.123	7.328	1.00	42.82	A2	ATOM 755 N GLY 101	37.441	70.505	11.272	1.00	45.40	A2
ATOM 713 H ILE 96	35.357	74.944	6.841	1.00	0.00	A2	ATOM 756 H GLY 101	36.893	70.704	12.056	1.00	0.00	A2
ATOM 714 CA ILE 96	33.760	73.692	7.312	1.00	42.12	A2	ATOM 757 CA GLY 101	38.703	71.238	11.126	1.00	42.52	A2
ATOM 715 CB ILE 96	33.665	72.233	6.800	1.00	36.33	A2	ATOM 758 C GLY 101	39.885	70.334	10.798	1.00	40.73	A2
ATOM 716 CG2 ILE 96	32.248	71.768	6.789	1.00	34.79	A2	ATOM 759 O GLY 101	40.475	70.402	9.710	1.00	40.69	A2
ATOM 717 CG1 ILE 96	34.091	72.157	5.374	1.00	35.35	A2	ATOM 760 N PRO 102	40.250	69.441	11.708	1.00	38.61	A2
ATOM 718 CD ILE 96	34.051	70.743	4.738	1.00	33.64	A2	ATOM 761 CD PRO 102	39.676	69.350	13.027	1.00	39.26	A2
ATOM 719 C ILE 96	33.106	73.863	8.709	1.00	44.74	A2	ATOM 762 CA PRO 102	41.390	68.566	11.606	1.00	37.30	A2
ATOM 720 O ILE 96	32.220	74.716	8.841	1.00	44.59	A2	ATOM 763 CB PRO 102	41.294	67.690	12.775	1.00	39.36	A2
ATOM 721 N SER 97	33.467	73.154	9.780	1.00	46.84	A2	ATOM 764 CG PRO 102	40.799	68.687	13.776	1.00	41.02	A2
ATOM 722 H SER 97	34.243	72.553	9.706	1.00	0.00	A2	ATOM 765 C PRO 102	41.364	67.795	10.331	1.00	37.15	A2
ATOM 723 CA SER 97	32.900	73.359	11.105	1.00	48.91	A2	ATOM 766 O PRO 102	42.358	67.854	9.600	1.00	38.88	A2
ATOM 724 CB SER 97	31.804	72.343	11.347	1.00	49.60	A2	ATOM 767 N THR 103	40.223	67.167	10.045	1.00	35.36	A2
ATOM 725 OG SER 97	32.211	71.120	11.954	1.00	52.85	A2	ATOM 768 H THR 103	39.466	67.223	10.662	1.00	0.00	A2
ATOM 726 HG SER 97	31.406	70.573	11.942	1.00	0.00	A2	ATOM 769 CA THR 103	40.051	66.386	8.843	1.00	34.62	A2
ATOM 727 C SER 97	34.045	73.143	12.077	1.00	50.64	A2	ATOM 770 CB THR 103	38.592	65.888	8.715	1.00	34.07	A2
ATOM 728 O SER 97	35.035	72.538	11.678	1.00	52.78	A2	ATOM 771 OG1 THR 103	38.356	65.240	9.936	1.00	35.43	A2
ATOM 729 N PRO 98	34.063	73.474	13.348	1.00	52.12	A2	ATOM 772 HG1 THR 103	38.011	65.896	10.548	1.00	0.00	A2
ATOM 730 CD PRO 98	33.002	74.170	14.016	1.00	52.90	A2	ATOM 773 CG2 THR 103	38.312	64.896	7.594	1.00	31.29	A2

FIG. 5J

ATOM	774 C THR 103	40.417	67.215	7.625	1.00	34.61	A2	ATOM	817 CD GLN 108	43.606	73.192	4.048	1.00	35.24	A2
ATOM	775 O THR 103	41.091	66.665	6.738	1.00	38.16	A2	ATOM	818 OE1 GLN 108	43.085	73.484	5.125	1.00	36.07	A2
ATOM	776 N LEU 104	40.054	68.498	7.529	1.00	32.49	A2	ATOM	819 NE2 GLN 108	44.189	74.044	3.213	1.00	33.58	A2
ATOM	777 H LEU 104	39.504	68.923	8.229	1.00	0.00	A2	ATOM	820 HE21 GLN 108	44.582	73.701	2.386	1.00	0.00	A2
ATOM	778 CA LEU 104	40.471	69.267	6.370	1.00	30.49	A2	ATOM	821 HE22 GLN 108	44.195	74.986	3.471	1.00	0.00	A2
ATOM	779 CB LEU 104	39.616	70.430	6.242	1.00	33.51	A2	ATOM	822 C GLN 108	46.840	69.842	2.675	1.00	26.40	A2
ATOM	780 CG LEU 104	38.356	69.996	5.611	1.00	36.61	A2	ATOM	823 O GLN 108	47.450	69.955	1.597	1.00	27.57	A2
ATOM	781 CD1 LEU 104	37.222	70.621	6.381	1.00	39.43	A2	ATOM	824 N LEU 109	47.388	69.473	3.833	1.00	25.81	A2
ATOM	782 CD2 LEU 104	38.418	70.294	4.132	1.00	37.89	A2	ATOM	825 H LEU 109	46.795	69.495	4.615	1.00	0.00	A2
ATOM	783 C LEU 104	41.904	69.727	6.414	1.00	28.48	A2	ATOM	826 CA LEU 109	48.764	69.003	4.043	1.00	27.96	A2
ATOM	784 O LEU 104	42.583	69.825	5.398	1.00	28.47	A2	ATOM	827 CB LEU 109	48.951	68.637	5.513	1.00	29.41	A2
ATOM	785 N ASP 105	42.449	69.949	7.574	1.00	26.99	A2	ATOM	828 CG LEU 109	48.712	69.771	6.520	1.00	31.78	A2
ATOM	786 H ASP 105	41.903	69.912	8.388	1.00	0.00	A2	ATOM	829 CD1 LEU 109	48.750	69.188	7.933	1.00	29.16	A2
ATOM	787 CA ASP 105	43.822	70.307	7.613	1.00	28.67	A2	ATOM	830 CD2 LEU 109	49.724	70.889	6.285	1.00	32.19	A2
ATOM	788 CB ASP 105	44.139	70.584	9.038	1.00	33.06	A2	ATOM	831 C LEU 109	49.168	67.790	3.186	1.00	26.80	A2
ATOM	789 CG ASP 105	43.438	71.808	9.593	1.00	35.46	A2	ATOM	832 O LEU 109	50.214	67.721	2.544	1.00	26.81	A2
ATOM	790 OD1 ASP 105	43.085	72.726	8.836	1.00	38.42	A2	ATOM	833 N ASP 110	48.305	66.807	3.090	1.00	25.98	A2
ATOM	791 OD2 ASP 105	43.244	71.816	10.808	1.00	39.10	A2	ATOM	834 H ASP 110	47.471	66.835	3.600	1.00	0.00	A2
ATOM	792 C ASP 105	44.701	69.206	7.032	1.00	28.90	A2	ATOM	835 CA ASP 110	48.590	65.684	2.250	1.00	23.32	A2
ATOM	793 O ASP 105	45.551	69.479	6.175	1.00	29.62	A2	ATOM	836 CB ASP 110	47.577	64.570	2.553	1.00	26.34	A2
ATOM	794 N THR 106	44.415	67.950	7.401	1.00	26.86	A2	ATOM	837 CG ASP 110	47.905	63.878	3.894	1.00	31.10	A2
ATOM	795 H THR 106	43.674	67.826	8.029	1.00	0.00	A2	ATOM	838 OD1 ASP 110	47.070	63.093	4.323	1.00	34.98	A2
ATOM	796 CA THR 106	45.143	66.770	6.935	1.00	24.81	A2	ATOM	839 OD2 ASP 110	48.958	64.107	4.535	1.00	34.06	A2
ATOM	797 CB THR 106	44.558	65.456	7.477	1.00	26.03	A2	ATOM	840 C ASP 110	48.557	66.138	0.842	1.00	21.31	A2
ATOM	798 OG1 THR 106	44.680	65.566	8.894	1.00	31.53	A2	ATOM	841 O ASP 110	49.493	65.711	0.165	1.00	20.63	A2
ATOM	799 HG1 THR 106	44.069	66.223	9.242	1.00	0.00	A2	ATOM	842 N VAL 111	47.627	66.998	0.363	1.00	20.80	A2
ATOM	800 CG1 THR 106	45.258	64.220	7.011	1.00	20.90	A2	ATOM	843 H VAL 111	46.900	67.310	0.944	1.00	0.00	A2
ATOM	801 C THR 106	45.073	66.684	5.460	1.00	23.75	A2	ATOM	844 CA VAL 111	47.711	67.454	-1.019	1.00	20.44	A2
ATOM	802 O THR 106	46.065	66.411	4.812	1.00	24.68	A2	ATOM	845 CB VAL 111	46.531	68.364	-1.376	1.00	23.60	A2
ATOM	803 N LEU 107	43.887	66.917	4.946	1.00	24.30	A2	ATOM	846 CG1 VAL 111	46.615	68.946	-2.808	1.00	23.04	A2
ATOM	804 H LEU 107	43.145	67.176	5.528	1.00	0.00	A2	ATOM	847 CG2 VAL 111	45.289	67.497	-1.371	1.00	24.30	A2
ATOM	805 CA LEU 107	43.668	66.783	3.531	1.00	27.29	A2	ATOM	848 C VAL 111	49.006	68.224	-1.245	1.00	20.82	A2
ATOM	806 CB LEU 107	42.158	66.913	3.273	1.00	25.45	A2	ATOM	849 O VAL 111	49.617	68.006	-2.303	1.00	19.22	A2
ATOM	807 CG LEU 107	41.642	66.888	1.863	1.00	26.24	A2	ATOM	850 N ALA 112	49.442	69.063	-0.267	1.00	21.84	A2
ATOM	808 CD1 LEU 107	42.095	65.649	1.158	1.00	26.41	A2	ATOM	851 H ALA 112	48.839	69.190	0.492	1.00	0.00	A2
ATOM	809 CD2 LEU 107	40.140	66.925	1.914	1.00	27.62	A2	ATOM	852 CA ALA 112	50.708	69.805	-0.295	1.00	24.16	A2
ATOM	810 C LEU 107	44.485	67.848	2.819	1.00	28.01	A2	ATOM	853 CB ALA 112	50.861	70.561	1.011	1.00	22.69	A2
ATOM	811 O LEU 107	45.154	67.555	1.823	1.00	30.72	A2	ATOM	854 C ALA 112	51.931	68.878	-0.486	1.00	28.58	A2
ATOM	812 N GLN 108	44.540	69.055	3.373	1.00	28.52	A2	ATOM	855 O ALA 112	52.778	69.026	-1.390	1.00	32.53	A2
ATOM	813 H GLN 108	44.030	69.221	4.194	1.00	0.00	A2	ATOM	856 N ASP 113	52.086	67.852	0.343	1.00	30.21	A2
ATOM	814 CA GLN 108	45.343	70.132	2.792	1.00	28.38	A2	ATOM	857 H ASP 113	51.507	67.817	1.130	1.00	0.00	A2
ATOM	815 CB GLN 108	45.138	71.363	3.630	1.00	30.15	A2	ATOM	858 CA ASP 113	53.084	66.846	0.166	1.00	31.70	A2
ATOM	816 CG GLN 108	43.711	71.787	3.542	1.00	32.67	A2	ATOM	859 CB ASP 113	52.706	65.659	0.953	1.00	36.31	A2

FIG. 5K

ATOM 860	CG ASP	113	53.170	65.758	2.357	1.00	42.27	ATOM	903	CA ILE	118	55.659	65.914	-8.182	1.00	47.97	A2
ATOM 861	OD1 ASP	113	52.559	65.109	3.203	1.00	46.37	ATOM	904	CB ILE	118	54.170	66.271	-8.452	1.00	47.69	A2
ATOM 862	OD2 ASP	113	54.160	66.461	2.589	1.00	48.93	ATOM	905	CG2 ILE	118	54.041	66.930	-9.835	1.00	47.03	A2
ATOM 863	C ASP	113	53.315	66.361	-1.239	1.00	32.82	ATOM	906	CG1 ILE	118	53.302	65.011	-8.244	1.00	44.00	A2
ATOM 864	O ASP	113	54.433	66.308	-1.754	1.00	36.25	ATOM	907	CD ILE	118	53.651	63.883	-9.236	1.00	43.71	A2
ATOM 865	N PHE	114	52.187	65.978	-1.830	1.00	30.94	ATOM	908	C ILE	118	56.647	66.932	-8.724	1.00	50.69	A2
ATOM 866	H PHE	114	51.344	66.164	-1.361	1.00	0.00	ATOM	909	O ILE	118	57.390	66.676	-9.681	1.00	49.98	A2
ATOM 867	CA PHE	114	52.109	65.328	-3.103	1.00	27.84	ATOM	910	N TRP	119	56.697	68.061	-8.015	1.00	54.68	A2
ATOM 868	CB PHE	114	50.708	64.794	-3.226	1.00	23.18	ATOM	911	H TRP	119	56.164	68.135	-7.197	1.00	0.00	A2
ATOM 869	CG PHE	114	50.565	63.928	-4.420	1.00	21.04	ATOM	912	CA TRP	119	57.575	69.142	-8.399	1.00	58.98	A2
ATOM 870	CD1 PHE	114	51.623	63.225	-4.938	1.00	24.05	ATOM	913	CB TRP	119	57.392	70.367	-7.477	1.00	59.84	A2
ATOM 871	CD2 PHE	114	49.369	63.914	-5.046	1.00	22.37	ATOM	914	CG TRP	119	58.051	71.529	-8.196	1.00	62.64	A2
ATOM 872	CE1 PHE	114	51.476	62.514	-6.102	1.00	24.54	ATOM	915	CD2 TRP	119	57.596	72.211	-9.307	1.00	63.78	A2
ATOM 873	CE2 PHE	114	49.211	63.207	-6.212	1.00	21.33	ATOM	916	CE2 TRP	119	58.699	72.955	-9.643	1.00	62.55	A2
ATOM 874	CZ PHE	114	50.263	62.509	-6.741	1.00	24.71	ATOM	917	CE3 TRP	119	56.465	72.314	-10.080	1.00	66.02	A2
ATOM 875	C PHE	114	52.453	66.291	-4.190	1.00	29.20	ATOM	918	CD1 TRP	119	59.322	71.870	-7.863	1.00	64.12	A2
ATOM 876	O PHE	114	53.072	65.883	-5.158	1.00	30.84	ATOM	919	NE1 TRP	119	59.680	72.727	-8.784	1.00	65.00	A2
ATOM 877	N ALA	115	52.057	67.554	-4.058	1.00	31.99	ATOM	920	HE1 TRP	119	60.568	73.140	-8.828	1.00	0.00	A2
ATOM 878	H ALA	115	51.446	67.768	-3.317	1.00	0.00	ATOM	921	CZ2 TRP	119	58.726	73.794	-10.714	1.00	62.90	A2
ATOM 879	CA ALA	115	52.423	68.655	-4.952	1.00	31.29	ATOM	922	CZ3 TRP	119	56.469	73.157	-11.170	1.00	65.18	A2
ATOM 880	CB ALA	115	51.824	69.939	-4.420	1.00	30.65	ATOM	923	CH2 TRP	119	57.591	73.887	-11.481	1.00	64.40	A2
ATOM 881	C ALA	115	53.936	68.787	-4.976	1.00	31.31	ATOM	924	C TRP	119	59.021	68.664	-8.352	1.00	61.26	A2
ATOM 882	O ALA	115	54.539	68.823	-6.044	1.00	30.36	ATOM	925	O TRP	119	59.748	68.788	-9.343	1.00	62.12	A2
ATOM 883	N THR	116	54.551	68.846	-3.813	1.00	32.20	ATOM	926	N GLN	120	59.447	68.065	-7.249	1.00	62.91	A2
ATOM 884	H THR	116	54.013	68.910	-2.992	1.00	0.00	ATOM	927	H GLN	120	58.811	67.961	-6.519	1.00	0.00	A2
ATOM 885	CA THR	116	55.998	68.897	-3.656	1.00	34.91	ATOM	928	CA GLN	120	60.786	67.504	-7.113	1.00	65.16	A2
ATOM 886	CB THR	116	56.325	68.953	-2.150	1.00	35.78	ATOM	929	CB GLN	120	60.900	66.800	-5.780	1.00	66.56	A2
ATOM 887	OG1 THR	116	55.564	70.038	-1.576	1.00	35.58	ATOM	930	CG GLN	120	60.627	67.678	-4.582	1.00	67.18	A2
ATOM 888	HG1 THR	116	54.942	69.644	-0.939	1.00	0.00	ATOM	931	CD GLN	120	60.725	66.907	-3.284	1.00	67.77	A2
ATOM 889	CG2 THR	116	57.816	69.050	-1.921	1.00	35.38	ATOM	932	OE1 GLN	120	61.221	67.465	-2.319	1.00	69.31	A2
ATOM 890	C THR	116	56.714	67.726	-4.304	1.00	37.14	ATOM	933	NE2 GLN	120	60.305	65.654	-3.129	1.00	67.39	A2
ATOM 891	O THR	116	57.641	67.937	-5.066	1.00	39.27	ATOM	934	HE21 GLN	120	59.903	65.174	-3.877	1.00	0.00	A2
ATOM 892	N THR	117	56.318	66.485	-4.045	1.00	39.05	ATOM	935	HE22 GLN	120	60.441	65.282	-2.234	1.00	0.00	A2
ATOM 893	H THR	117	55.615	66.383	-3.369	1.00	0.00	ATOM	936	C GLN	120	61.169	66.509	-8.222	1.00	66.22	A2
ATOM 894	CA THR	117	56.840	65.269	-4.630	1.00	40.23	ATOM	937	O GLN	120	62.326	66.421	-8.662	1.00	66.50	A2
ATOM 895	CB THR	117	55.909	64.090	-4.216	1.00	39.99	ATOM	938	N GLN	121	60.202	65.745	-8.706	1.00	67.10	A2
ATOM 896	OG1 THR	117	56.149	63.920	-2.820	1.00	41.66	ATOM	939	H GLN	121	59.307	65.754	-8.303	1.00	0.00	A2
ATOM 897	HG1 THR	117	55.653	64.559	-2.286	1.00	0.00	ATOM	940	CA GLN	121	60.480	64.878	-9.812	1.00	68.66	A2
ATOM 898	CG2 THR	117	56.110	62.781	-4.981	1.00	38.23	ATOM	941	CB GLN	121	59.292	63.971	-10.070	1.00	67.96	A2
ATOM 899	C THR	117	56.882	65.417	-6.134	1.00	43.42	ATOM	942	CG GLN	121	59.614	62.937	-11.128	1.00	68.89	A2
ATOM 900	O THR	117	57.934	65.253	-6.749	1.00	46.29	ATOM	943	CD GLN	121	60.940	62.236	-10.852	1.00	71.37	A2
ATOM 901	N ILE	118	55.763	65.777	-6.741	1.00	45.87	ATOM	944	OE1 GLN	121	61.212	61.706	-9.777	1.00	71.70	A2
ATOM 902	H ILE	118	54.962	65.942	-6.200	1.00	0.00	ATOM	945	NE2 GLN	121	61.879	62.262	-11.786	1.00	74.41	A2

FIG. 5L

ATOM 946	HE21 GLN 121	61.707	62.729	-12.627	1.00	0.00	A2	ATOM 989	H GLY 126	64.741	67.976	-14.056	1.00	0.00	A2
ATOM 947	HE22 GLN 121	62.736	61.859	-11.541	1.00	0.00	A2	ATOM 990	CA GLY 126	64.968	69.213	-15.736	1.00	77.58	A2
ATOM 948	C GLN 121	60.760	65.743	-11.045	1.00	70.48	A2	ATOM 991	C GLY 126	63.697	69.814	-16.330	1.00	78.63	A2
ATOM 949	O GLN 121	61.671	65.436	-11.827	1.00	70.94	A2	ATOM 992	O GLY 126	63.735	70.736	-17.146	1.00	78.55	A2
ATOM 950	N MET 122	60.019	66.846	-11.236	1.00	71.67	A2	ATOM 993	N MET 127	62.524	69.343	-15.933	1.00	80.08	A2
ATOM 951	H MET 122	59.351	67.087	-10.555	1.00	70.00	A2	ATOM 994	H MET 127	62.522	68.603	-15.293	1.00	0.00	A2
ATOM 952	CA MET 122	60.190	67.688	-12.412	1.00	72.62	A2	ATOM 995	CA MET 127	61.266	69.902	-16.415	1.00	81.46	A2
ATOM 953	CB MET 122	59.173	68.819	-12.448	1.00	73.12	A2	ATOM 996	CB MET 127	60.191	68.802	-16.361	1.00	81.86	A2
ATOM 954	CG MET 122	57.880	68.343	-13.083	1.00	73.64	A2	ATOM 997	CG MET 127	60.708	67.599	-17.147	1.00	82.66	A2
ATOM 955	SD MET 122	56.669	69.662	-13.295	1.00	75.44	A2	ATOM 998	SD MET 127	59.682	66.115	-17.282	1.00	83.70	A2
ATOM 956	CE MET 122	55.695	69.349	-11.861	1.00	76.43	A2	ATOM 999	CE MET 127	60.236	65.620	-18.900	1.00	83.23	A2
ATOM 957	C MET 122	61.566	68.281	-12.411	1.00	73.22	A2	ATOM 1000	C MET 127	60.847	71.131	-15.599	1.00	82.18	A2
ATOM 958	O MET 122	62.240	68.287	-13.441	1.00	73.03	A2	ATOM 1001	OT1 MET 127	60.116	71.958	-16.142	1.00	83.86	A2
ATOM 959	N GLU 123	61.991	68.697	-11.223	1.00	74.74	A2	ATOM 1002	OT2 MET 127	61.267	71.285	-14.446	1.00	82.04	A2
ATOM 960	H GLU 123	61.372	68.617	-10.466	1.00	0.00	A2	ATOM 1003	CB MET 138	39.323	80.595	-4.492	1.00	59.39	A3
ATOM 961	CA GLU 123	63.305	69.262	-11.018	1.00	75.95	A2	ATOM 1004	CG MET 138	40.123	79.298	-4.421	1.00	57.97	A3
ATOM 962	CB GLU 123	63.484	69.665	-9.597	1.00	75.72	A2	ATOM 1005	SD MET 138	40.561	78.973	-6.145	1.00	60.85	A3
ATOM 963	CG GLU 123	62.644	70.906	-9.500	1.00	79.11	A2	ATOM 1006	CE MET 138	41.129	77.310	-6.351	1.00	61.48	A3
ATOM 964	CD GLU 123	62.651	71.529	-8.122	1.00	83.02	A2	ATOM 1007	C MET 138	37.021	81.072	-5.454	1.00	60.26	A3
ATOM 965	OE1 GLU 123	62.741	72.763	-8.057	1.00	84.15	A2	ATOM 1008	O MET 138	36.832	82.262	-5.181	1.00	62.98	A3
ATOM 966	OE2 GLU 123	62.543	70.789	-7.133	1.00	84.45	A2	ATOM 1009	HT1 MET 138	38.497	82.600	-6.075	1.00	0.00	A3
ATOM 967	C GLU 123	64.381	68.280	-11.386	1.00	77.17	A2	ATOM 1010	HT2 MET 138	38.313	81.757	-7.529	1.00	0.00	A3
ATOM 968	O GLU 123	65.092	68.558	-12.356	1.00	78.22	A2	ATOM 1011	N MET 138	38.839	81.784	-6.639	1.00	60.49	A3
ATOM 969	N GLU 124	64.504	67.110	-10.765	1.00	77.66	A2	ATOM 1012	HT3 MET 138	39.865	81.816	-6.768	1.00	0.00	A3
ATOM 970	H GLU 124	63.867	66.852	-10.060	1.00	0.00	A2	ATOM 1013	CA MET 138	38.445	80.672	-5.787	1.00	60.51	A3
ATOM 971	CA GLU 124	65.574	66.215	-11.167	1.00	78.47	A2	ATOM 1014	N PRO 139	35.995	80.242	-5.612	1.00	57.82	A3
ATOM 972	CB GLU 124	65.600	65.051	-10.195	1.00	80.79	A2	ATOM 1015	CD PRO 139	36.028	79.060	-6.448	1.00	58.10	A3
ATOM 973	CG GLU 124	64.387	64.132	-10.150	1.00	83.29	A2	ATOM 1016	CA PRO 139	34.654	80.538	-5.142	1.00	54.67	A3
ATOM 974	CD GLU 124	64.375	63.248	-8.908	1.00	85.51	A2	ATOM 1017	CB PRO 139	33.870	79.323	-5.525	1.00	54.54	A3
ATOM 975	OE1 GLU 124	64.733	63.729	-7.824	1.00	86.84	A2	ATOM 1018	CG PRO 139	34.945	78.290	-5.755	1.00	58.20	A3
ATOM 976	OE2 GLU 124	64.006	62.075	-9.024	1.00	86.39	A2	ATOM 1019	C PRO 139	34.588	80.875	-3.664	1.00	52.24	A3
ATOM 977	C GLU 124	65.534	65.705	-12.612	1.00	78.01	A2	ATOM 1020	O PRO 139	35.507	80.623	-2.882	1.00	51.89	A3
ATOM 978	O GLU 124	66.480	65.057	-13.060	1.00	78.91	A2	ATOM 1021	N ALA 140	33.499	81.547	-3.342	1.00	49.86	A3
ATOM 979	N LEU 125	64.460	65.943	-13.363	1.00	77.11	A2	ATOM 1022	H ALA 140	32.789	81.676	-4.005	1.00	0.00	A3
ATOM 980	H LEU 125	63.666	66.340	-12.945	1.00	0.00	A2	ATOM 1023	CA ALA 140	33.234	81.926	-1.994	1.00	49.39	A3
ATOM 981	CA LEU 125	64.387	65.583	-14.771	1.00	76.23	A2	ATOM 1024	CB ALA 140	32.966	83.413	-1.895	1.00	49.94	A3
ATOM 982	CB LEU 125	63.061	64.832	-14.952	1.00	76.88	A2	ATOM 1025	C ALA 140	31.978	81.153	-1.590	1.00	49.25	A3
ATOM 983	CG LEU 125	62.392	64.382	-16.263	1.00	76.63	A2	ATOM 1026	O ALA 140	30.889	81.162	-2.205	1.00	49.06	A3
ATOM 984	CD1 LEU 125	63.350	63.754	-17.276	1.00	76.67	A2	ATOM 1027	N PHE 141	32.293	80.442	-0.506	1.00	47.48	A3
ATOM 985	CD2 LEU 125	61.309	63.402	-15.839	1.00	75.89	A2	ATOM 1028	H PHE 141	33.190	80.550	-0.122	1.00	0.00	A3
ATOM 986	C LEU 125	64.506	66.827	-15.648	1.00	75.84	A2	ATOM 1029	CA PHE 141	31.401	79.552	0.208	1.00	45.66	A3
ATOM 987	O LEU 125	64.360	66.788	-16.871	1.00	75.36	A2	ATOM 1030	CB PHE 141	32.215	78.305	0.792	1.00	40.28	A3
ATOM 988	N GLY 126	64.759	67.968	-15.027	1.00	75.90	A2	ATOM 1031	CG PHE 141	32.684	77.404	-0.349	1.00	35.35	A3

FIG. 5M

ATOM 1032	CD1 PHE 141	31.800	76.591	-1.006	1.00	34.39	A3	ATOM 1075	CG GLN 146	26.884	78.066	0.049	1.00	43.26	A3
ATOM 1033	CD2 PHE 141	33.966	77.497	-0.830	1.00	37.69	A3	ATOM 1076	CD GLN 146	27.171	79.440	-0.522	1.00	45.37	A3
ATOM 1034	CE1 PHE 141	32.174	75.895	-2.133	1.00	34.00	A3	ATOM 1077	OE1 GLN 146	27.851	80.253	0.083	1.00	47.57	A3
ATOM 1035	CE2 PHE 141	34.358	76.807	-1.956	1.00	36.69	A3	ATOM 1078	NE2 GLN 146	26.689	79.793	-1.692	1.00	47.50	A3
ATOM 1036	CZ PHE 141	33.449	76.001	-2.614	1.00	37.29	A3	ATOM 1079	HE21 GLN 146	26.149	79.149	-2.190	1.00	0.00	A3
ATOM 1037	C PHE 141	31.003	80.580	1.242	1.00	46.54	A3	ATOM 1080	HE22 GLN 146	26.913	80.690	-2.021	1.00	0.00	A3
ATOM 1038	O PHE 141	31.584	80.664	2.317	1.00	48.26	A3	ATOM 1081	C GLN 146	29.005	75.670	1.836	1.00	37.25	A3
ATOM 1039	N ALA 142	30.067	81.452	0.843	1.00	47.38	A3	ATOM 1082	O GLN 146	29.634	75.093	0.950	1.00	38.28	A3
ATOM 1040	H ALA 142	29.624	81.295	-0.020	1.00	0.00	A3	ATOM 1083	N ARG 147	29.511	75.775	3.054	1.00	36.37	A3
ATOM 1041	CA ALA 142	29.581	82.564	1.668	1.00	46.06	A3	ATOM 1084	H ARG 147	29.044	76.300	3.738	1.00	0.00	A3
ATOM 1042	CB ALA 142	28.731	83.546	0.879	1.00	45.04	A3	ATOM 1085	CA ARG 147	30.798	75.180	3.357	1.00	35.68	A3
ATOM 1043	C ALA 142	28.703	82.132	2.802	1.00	45.27	A3	ATOM 1086	CB ARG 147	31.299	75.574	4.713	1.00	37.12	A3
ATOM 1044	O ALA 142	28.343	83.002	3.584	1.00	47.38	A3	ATOM 1087	CG ARG 147	31.730	77.016	4.697	1.00	42.68	A3
ATOM 1045	N SER 143	28.318	80.860	2.899	1.00	43.36	A3	ATOM 1088	CD ARG 147	32.034	77.494	6.093	1.00	49.54	A3
ATOM 1046	H SER 143	28.724	80.201	2.303	1.00	0.00	A3	ATOM 1089	NE ARG 147	32.674	78.774	5.877	1.00	58.21	A3
ATOM 1047	CA SER 143	27.377	80.392	3.897	1.00	41.94	A3	ATOM 1090	HE ARG 147	32.475	79.252	5.045	1.00	0.00	A3
ATOM 1048	CB SER 143	26.036	80.129	3.181	1.00	44.17	A3	ATOM 1091	CZ ARG 147	33.519	79.373	6.742	1.00	62.77	A3
ATOM 1049	OG SER 143	25.323	78.918	3.536	1.00	48.18	A3	ATOM 1092	NH1 ARG 147	33.905	78.868	7.936	1.00	63.96	A3
ATOM 1050	HG SER 143	24.455	78.974	3.098	1.00	0.00	A3	ATOM 1093	HH11 ARG 147	34.545	79.379	8.510	1.00	0.00	A3
ATOM 1051	C SER 143	27.877	79.145	4.602	1.00	39.79	A3	ATOM 1094	HH12 ARG 147	33.561	77.980	8.239	1.00	0.00	A3
ATOM 1052	O SER 143	28.763	78.452	4.132	1.00	38.50	A3	ATOM 1095	NH2 ARG 147	33.960	80.584	6.403	1.00	64.80	A3
ATOM 1053	N ALA 144	27.218	78.775	5.683	1.00	39.10	A3	ATOM 1096	HH21 ARG 147	34.599	81.069	6.999	1.00	0.00	A3
ATOM 1054	H ALA 144	26.449	79.312	5.960	1.00	0.00	A3	ATOM 1097	HH22 ARG 147	33.665	80.996	5.541	1.00	0.00	A3
ATOM 1055	CA ALA 144	27.566	77.586	6.411	1.00	39.22	A3	ATOM 1098	C ARG 147	30.570	73.702	3.337	1.00	34.91	A3
ATOM 1056	CB ALA 144	26.982	77.598	7.802	1.00	36.97	A3	ATOM 1099	O ARG 147	31.233	73.050	2.539	1.00	34.56	A3
ATOM 1057	C ALA 144	26.964	76.420	5.627	1.00	41.58	A3	ATOM 1100	N ALA 148	29.544	73.194	4.040	1.00	33.44	A3
ATOM 1058	O ALA 144	27.706	75.448	5.444	1.00	42.07	A3	ATOM 1101	H ALA 148	28.926	73.818	4.482	1.00	0.00	A3
ATOM 1059	N PHE 145	25.719	76.407	5.076	1.00	40.77	A3	ATOM 1102	CA ALA 148	29.358	71.754	4.172	1.00	33.92	A3
ATOM 1060	H PHE 145	25.149	77.203	5.110	1.00	0.00	A3	ATOM 1103	CB ALA 148	28.217	71.426	5.163	1.00	32.85	A3
ATOM 1061	CA PHE 145	25.307	75.234	4.312	1.00	39.31	A3	ATOM 1104	C ALA 148	29.077	71.095	2.843	1.00	33.40	A3
ATOM 1062	CB PHE 145	23.877	75.396	3.798	1.00	36.46	A3	ATOM 1105	O ALA 148	29.765	70.141	2.457	1.00	34.31	A3
ATOM 1063	CG PHE 145	23.477	74.452	2.641	1.00	31.91	A3	ATOM 1106	N ALA 149	28.169	71.657	2.077	1.00	32.60	A3
ATOM 1064	CD1 PHE 145	23.579	74.900	1.323	1.00	29.02	A3	ATOM 1107	H ALA 149	27.662	72.424	2.411	1.00	0.00	A3
ATOM 1065	CD2 PHE 145	23.013	73.185	2.916	1.00	29.40	A3	ATOM 1108	CA ALA 149	27.890	71.134	0.757	1.00	32.70	A3
ATOM 1066	CE1 PHE 145	23.225	74.100	0.277	1.00	28.34	A3	ATOM 1109	CB ALA 149	26.595	71.774	0.299	1.00	31.91	A3
ATOM 1067	CE2 PHE 145	22.661	72.389	1.858	1.00	28.80	A3	ATOM 1110	C ALA 149	29.032	71.381	-0.258	1.00	33.75	A3
ATOM 1068	CZ PHE 145	22.764	72.831	0.549	1.00	30.58	A3	ATOM 1111	O ALA 149	29.208	70.661	-1.264	1.00	34.49	A3
ATOM 1069	C PHE 145	26.266	75.071	3.120	1.00	40.44	A3	ATOM 1112	N GLY 150	29.867	72.401	-0.052	1.00	33.58	A3
ATOM 1070	O PHE 145	26.556	73.938	2.697	1.00	40.55	A3	ATOM 1113	H GLY 150	29.724	73.035	0.682	1.00	0.00	A3
ATOM 1071	N GLN 146	26.745	76.232	2.619	1.00	39.11	A3	ATOM 1114	CA GLY 150	31.017	72.608	-0.913	1.00	31.79	A3
ATOM 1072	H GLN 146	26.437	77.073	3.015	1.00	0.00	A3	ATOM 1115	C GLY 150	32.113	71.629	-0.478	1.00	31.39	A3
ATOM 1073	CA GLN 146	27.660	76.263	1.511	1.00	38.01	A3	ATOM 1116	O GLY 150	32.997	71.261	-1.265	1.00	31.77	A3
ATOM 1074	CB GLN 146	27.907	77.644	1.054	1.00	38.92	A3	ATOM 1117	N GLY 151	32.075	71.161	0.773	1.00	29.83	A3

FIG. 5N

ATOM 1118 H GLY 151	31.412	71.524	1.394	1.00	0.00	A3	ATOM 1161 N HIS 157	35.054	65.576	-6.133	1.00	33.90	A3
ATOM 1119 CA GLY 151	33.018	70.166	1.243	1.00	32.16	A3	ATOM 1162 H HIS 157	34.771	66.349	-5.605	1.00	0.00	A3
ATOM 1120 C GLY 151	32.764	68.909	0.409	1.00	33.98	A3	ATOM 1163 CA HIS 157	35.821	65.773	-7.383	1.00	31.19	A3
ATOM 1121 O GLY 151	33.664	68.501	-0.349	1.00	35.66	A3	ATOM 1164 CB HIS 157	35.707	67.209	-7.900	1.00	32.59	A3
ATOM 1122 N VAL 152	31.486	68.418	0.451	1.00	31.87	A3	ATOM 1165 CG HIS 157	34.369	67.449	-8.566	1.00	31.11	A3
ATOM 1123 H VAL 152	30.867	68.906	1.040	1.00	0.00	A3	ATOM 1166 CD2 HIS 157	34.127	67.394	-9.928	1.00	30.78	A3
ATOM 1124 CA VAL 152	30.978	67.240	-0.275	1.00	29.61	A3	ATOM 1167 ND1 HIS 157	33.223	67.666	-7.942	1.00	32.36	A3
ATOM 1125 CB VAL 152	29.419	67.145	-0.125	1.00	27.63	A3	ATOM 1168 HD1 HIS 157	33.080	67.773	-6.979	1.00	0.00	A3
ATOM 1126 CG1 VAL 152	28.883	66.035	-0.976	1.00	27.37	A3	ATOM 1169 CE1 HIS 157	32.293	67.732	-8.875	1.00	32.01	A3
ATOM 1127 CG2 VAL 152	29.002	66.786	1.279	1.00	24.74	A3	ATOM 1170 NE2 HIS 157	32.838	67.571	-10.060	1.00	29.18	A3
ATOM 1128 C VAL 152	31.351	67.294	-1.762	1.00	29.91	A3	ATOM 1171 HE2 HIS 157	32.327	67.621	-10.895	1.00	0.00	A3
ATOM 1129 O VAL 152	31.805	66.329	-2.393	1.00	31.75	A3	ATOM 1172 C HIS 157	37.291	65.476	-7.269	1.00	29.68	A3
ATOM 1130 N LEU 153	31.236	68.452	-2.361	1.00	29.26	A3	ATOM 1173 O HIS 157	37.950	65.059	-8.219	1.00	29.65	A3
ATOM 1131 H LEU 153	30.881	69.219	-1.860	1.00	0.00	A3	ATOM 1174 N LEU 158	37.801	65.669	-6.071	1.00	29.24	A3
ATOM 1132 CA LEU 153	31.559	68.607	-3.756	1.00	26.77	A3	ATOM 1175 H LEU 158	37.213	65.901	-5.326	1.00	0.00	A3
ATOM 1133 CB LEU 153	30.881	69.858	-4.160	1.00	28.22	A3	ATOM 1176 CA LEU 158	39.216	65.479	-5.826	1.00	31.94	A3
ATOM 1134 CG LEU 153	29.943	69.894	-5.316	1.00	30.67	A3	ATOM 1177 CB LEU 158	39.609	65.949	-4.373	1.00	28.66	A3
ATOM 1135 CD1 LEU 153	28.580	69.281	-5.090	1.00	26.48	A3	ATOM 1178 CG LEU 158	41.008	65.751	-3.859	1.00	24.32	A3
ATOM 1136 CD2 LEU 153	29.741	71.365	-5.496	1.00	34.46	A3	ATOM 1179 CD1 LEU 158	41.990	66.378	-4.776	1.00	20.87	A3
ATOM 1137 C LEU 153	33.032	68.628	-4.111	1.00	26.08	A3	ATOM 1180 CD2 LEU 158	41.099	66.330	-2.477	1.00	24.86	A3
ATOM 1138 O LEU 153	33.419	68.187	-5.212	1.00	26.78	A3	ATOM 1181 C LEU 158	39.468	63.994	-6.027	1.00	31.46	A3
ATOM 1139 N VAL 154	33.902	69.180	-3.269	1.00	26.12	A3	ATOM 1182 O LEU 158	40.298	63.609	-6.844	1.00	30.58	A3
ATOM 1140 H VAL 154	33.589	69.557	-2.416	1.00	0.00	A3	ATOM 1183 N GLN 159	38.652	63.225	-5.340	1.00	33.54	A3
ATOM 1141 CA VAL 154	35.330	69.259	-3.611	1.00	26.23	A3	ATOM 1184 H GLN 159	38.011	63.676	-4.748	1.00	0.00	A3
ATOM 1142 CB VAL 154	36.057	70.299	-2.692	1.00	26.51	A3	ATOM 1185 CA GLN 159	38.594	61.792	-5.442	1.00	35.73	A3
ATOM 1143 CG1 VAL 154	37.578	70.188	-2.942	1.00	25.01	A3	ATOM 1186 CB GLN 159	37.308	61.492	-4.813	1.00	37.26	A3
ATOM 1144 CG2 VAL 154	35.528	71.728	-2.945	1.00	27.82	A3	ATOM 1187 CG GLN 159	37.064	60.063	-4.520	1.00	45.01	A3
ATOM 1145 C VAL 154	35.933	67.850	-3.375	1.00	26.80	A3	ATOM 1188 CD GLN 159	37.755	59.611	-3.256	1.00	46.24	A3
ATOM 1146 O VAL 154	36.678	67.363	-4.229	1.00	26.27	A3	ATOM 1189 OE1 GLN 159	38.142	58.443	-3.232	1.00	48.29	A3
ATOM 1147 N ALA 155	35.635	67.241	-2.199	1.00	24.76	A3	ATOM 1190 NE2 GLN 159	37.936	60.456	-2.224	1.00	47.82	A3
ATOM 1148 H ALA 155	35.084	67.758	-1.570	1.00	0.00	A3	ATOM 1191 HE21 GLN 159	37.575	61.364	-2.289	1.00	0.00	A3
ATOM 1149 CA ALA 155	36.095	65.940	-1.782	1.00	25.21	A3	ATOM 1192 HE22 GLN 159	38.412	60.101	-1.447	1.00	0.00	A3
ATOM 1150 CB ALA 155	35.463	65.572	-0.457	1.00	25.25	A3	ATOM 1193 C GLN 159	38.686	61.381	-6.921	1.00	36.24	A3
ATOM 1151 C ALA 155	35.708	64.946	-2.841	1.00	26.94	A3	ATOM 1194 O GLN 159	39.632	60.690	-7.324	1.00	38.97	A3
ATOM 1152 O ALA 155	36.594	64.288	-3.398	1.00	26.76	A3	ATOM 1195 N SER 160	37.824	61.896	-7.796	1.00	35.48	A3
ATOM 1153 N SER 156	34.450	64.982	-3.282	1.00	29.96	A3	ATOM 1196 H SER 160	37.142	62.540	-7.498	1.00	0.00	A3
ATOM 1154 H SER 156	33.790	65.577	-2.868	1.00	0.00	A3	ATOM 1197 CA SER 160	37.869	61.564	-9.203	1.00	34.96	A3
ATOM 1155 CA SER 156	34.034	64.105	-4.354	1.00	32.17	A3	ATOM 1198 CB SER 160	36.645	62.100	-9.863	1.00	37.54	A3
ATOM 1156 CB SER 156	32.531	64.319	-4.544	1.00	34.23	A3	ATOM 1199 OG SER 160	35.587	62.434	-8.942	1.00	44.81	A3
ATOM 1157 OG SER 156	32.000	64.195	-5.879	1.00	39.35	A3	ATOM 1200 HG SER 160	35.340	61.689	-8.387	1.00	0.00	A3
ATOM 1158 HG SER 156	31.120	63.815	-5.851	1.00	0.00	A3	ATOM 1201 C SER 160	39.090	62.095	-9.922	1.00	34.65	A3
ATOM 1159 C SER 156	34.845	64.338	-5.632	1.00	33.46	A3	ATOM 1202 O SER 160	39.605	61.382	-10.785	1.00	35.42	A3
ATOM 1160 O SER 156	35.411	63.380	-6.174	1.00	34.62	A3	ATOM 1203 N PHE 161	39.615	63.293	-9.595	1.00	33.82	A3

FIG. 50

ATOM 1204 H PHE 161	39.203	63.796	-8.864	1.00	0.00	A3	ATOM 1247 HG SER 165	45.997	60.694	-9.261	1.00	0.00	A3
ATOM 1205 CA PHE 161	40.820	63.850	-10.218	1.00	31.21	A3	ATOM 1248 C SER 165	46.958	59.502	-11.630	1.00	55.15	A3
ATOM 1206 CB PHE 161	41.110	65.264	-9.629	1.00	28.28	A3	ATOM 1249 O SER 165	48.028	59.227	-12.148	1.00	55.02	A3
ATOM 1207 CG PHE 161	42.455	65.881	-10.062	1.00	24.92	A3	ATOM 1250 N TYR 166	46.239	58.645	-10.900	1.00	58.57	A3
ATOM 1208 CD1 PHE 161	42.696	66.228	-11.389	1.00	22.98	A3	ATOM 1251 H TYR 166	45.374	58.948	-10.549	1.00	0.00	A3
ATOM 1209 CD2 PHE 161	43.464	66.021	-9.135	1.00	23.03	A3	ATOM 1252 CA TYR 166	46.617	57.273	-10.625	1.00	61.42	A3
ATOM 1210 CE1 PHE 161	43.941	66.695	-11.767	1.00	21.06	A3	ATOM 1253 CB TYR 166	45.543	56.653	-9.680	1.00	64.05	A3
ATOM 1211 CE2 PHE 161	44.701	66.495	-9.528	1.00	20.28	A3	ATOM 1254 CG TYR 166	45.502	55.138	-9.682	1.00	69.00	A3
ATOM 1212 CZ PHE 161	44.939	66.826	-10.832	1.00	17.03	A3	ATOM 1255 CD1 TYR 166	44.389	54.501	-10.185	1.00	71.64	A3
ATOM 1213 C PHE 161	42.008	62.907	-9.943	1.00	31.77	A3	ATOM 1256 CE1 TYR 166	44.367	53.130	-10.283	1.00	73.15	A3
ATOM 1214 O PHE 161	42.786	62.578	-10.845	1.00	32.63	A3	ATOM 1257 CD2 TYR 166	46.594	54.409	-9.257	1.00	71.27	A3
ATOM 1215 N LEU 162	42.117	62.434	-8.690	1.00	31.67	A3	ATOM 1258 CE2 TYR 166	46.584	53.040	-9.346	1.00	72.92	A3
ATOM 1216 H LEU 162	41.420	62.691	-8.054	1.00	0.00	A3	ATOM 1259 CZ TYR 166	45.468	52.417	-9.862	1.00	75.71	A3
ATOM 1217 CA LEU 162	43.186	61.574	-8.232	1.00	31.29	A3	ATOM 1260 OH TYR 166	45.474	51.038	-10.016	1.00	80.61	A3
ATOM 1218 CB LEU 162	43.204	61.433	-6.743	1.00	25.84	A3	ATOM 1261 HH TYR 166	44.571	50.736	-10.134	1.00	0.00	A3
ATOM 1219 CG LEU 162	43.693	62.674	-6.003	1.00	26.02	A3	ATOM 1262 C TYR 166	46.712	56.567	-11.987	1.00	62.34	A3
ATOM 1220 CD1 LEU 162	43.594	62.455	-4.516	1.00	25.24	A3	ATOM 1263 O TYR 166	47.766	55.981	-12.282	1.00	63.25	A3
ATOM 1221 CD2 LEU 162	45.107	62.994	-6.415	1.00	27.04	A3	ATOM 1264 N ALA 167	45.727	56.622	-12.884	1.00	61.27	A3
ATOM 1222 C LEU 162	43.061	60.212	-8.813	1.00	34.23	A3	ATOM 1265 H ALA 167	44.893	57.089	-12.678	1.00	0.00	A3
ATOM 1223 O LEU 162	44.107	59.654	-9.070	1.00	36.51	A3	ATOM 1266 CA ALA 167	45.933	55.982	-14.159	1.00	61.47	A3
ATOM 1224 N GLU 163	41.926	59.589	-9.082	1.00	37.24	A3	ATOM 1267 CB ALA 167	44.608	55.904	-14.904	1.00	60.98	A3
ATOM 1225 H GLU 163	41.072	60.002	-8.826	1.00	0.00	A3	ATOM 1268 C ALA 167	46.982	56.694	-15.020	1.00	62.19	A3
ATOM 1226 CA GLU 163	41.975	58.327	-9.771	1.00	40.47	A3	ATOM 1269 O ALA 167	47.719	56.000	-15.734	1.00	62.63	A3
ATOM 1227 CB GLU 163	40.566	57.716	-9.835	1.00	45.38	A3	ATOM 1270 N VAL 168	47.210	58.011	-14.991	1.00	63.37	A3
ATOM 1228 CG GLU 163	40.264	56.975	-8.526	1.00	51.84	A3	ATOM 1271 H VAL 168	46.756	58.570	-14.330	1.00	0.00	A3
ATOM 1229 CD GLU 163	41.291	55.889	-8.126	1.00	57.97	A3	ATOM 1272 CA VAL 168	48.174	58.593	-15.923	1.00	65.62	A3
ATOM 1230 OE1 GLU 163	40.897	54.722	-8.092	1.00	62.01	A3	ATOM 1273 CB VAL 168	48.061	60.121	-16.131	1.00	66.30	A3
ATOM 1231 OE2 GLU 163	42.466	56.180	-7.832	1.00	59.17	A3	ATOM 1274 CG1 VAL 168	46.687	60.431	-16.706	1.00	66.78	A3
ATOM 1232 C GLU 163	42.586	58.430	-11.142	1.00	41.34	A3	ATOM 1275 CG2 VAL 168	48.278	60.879	-14.840	1.00	68.47	A3
ATOM 1233 O GLU 163	43.456	57.633	-11.486	1.00	42.17	A3	ATOM 1276 C VAL 168	49.579	58.339	-15.469	1.00	66.45	A3
ATOM 1234 N VAL 164	42.257	59.436	-11.920	1.00	42.28	A3	ATOM 1277 O VAL 168	50.458	58.183	-16.302	1.00	66.22	A3
ATOM 1235 H VAL 164	41.589	60.091	-11.615	1.00	0.00	A3	ATOM 1278 N LEU 169	49.823	58.241	-14.177	1.00	68.83	A3
ATOM 1236 CA VAL 164	42.911	59.609	-13.187	1.00	44.13	A3	ATOM 1279 H LEU 169	49.102	58.404	-13.536	1.00	0.00	A3
ATOM 1237 CB VAL 164	42.207	60.711	-13.940	1.00	45.52	A3	ATOM 1280 CA LEU 169	51.141	57.899	-13.695	1.00	71.81	A3
ATOM 1238 CG1 VAL 164	42.892	60.975	-15.278	1.00	48.79	A3	ATOM 1281 CG LEU 169	51.249	58.228	-12.188	1.00	71.53	A3
ATOM 1239 CG2 VAL 164	40.786	60.269	-14.226	1.00	46.09	A3	ATOM 1282 CG LEU 169	51.137	59.732	-11.813	1.00	70.68	A3
ATOM 1240 C VAL 164	44.386	59.933	-12.991	1.00	46.13	A3	ATOM 1283 CD1 LEU 169	51.187	59.826	-10.298	1.00	69.39	A3
ATOM 1241 O VAL 164	45.192	59.473	-13.794	1.00	45.99	A3	ATOM 1284 CD2 LEU 169	52.223	60.580	-12.491	1.00	68.49	A3
ATOM 1242 N SER 165	44.879	60.677	-12.006	1.00	49.51	A3	ATOM 1285 C LEU 169	51.333	56.414	-13.979	1.00	73.61	A3
ATOM 1243 H SER 165	44.287	61.173	-11.396	1.00	0.00	A3	ATOM 1286 O LEU 169	52.408	56.013	-14.429	1.00	74.75	A3
ATOM 1244 CA SER 165	46.325	60.845	-11.895	1.00	53.44	A3	ATOM 1287 N ARG 170	50.309	55.583	-13.819	1.00	75.45	A3
ATOM 1245 CB SER 165	46.715	61.796	-10.775	1.00	54.77	A3	ATOM 1288 H ARG 170	49.488	55.923	-13.399	1.00	0.00	A3
ATOM 1246 OG SER 165	46.049	61.618	-9.530	1.00	59.99	A3	ATOM 1289 CA ARG 170	50.364	54.179	-14.199	1.00	78.17	A3

FIG. 5P

ATOM 1290	CB	ARG	170	48.944	53.642	-14.004	1.00	78.45	A3	ATOM 1333	CB	LEU	210	45.234	42.591	25.453	1.00	52.47	B1
ATOM 1291	CG	ARG	170	48.394	52.506	-14.871	1.00	78.17	A3	ATOM 1334	CG	LEU	210	43.799	42.058	25.547	1.00	51.68	B1
ATOM 1292	CD	ARG	170	48.744	51.181	-14.271	1.00	77.25	A3	ATOM 1335	CD1	LEU	210	43.123	42.562	26.804	1.00	53.37	B1
ATOM 1293	NE	ARG	170	48.123	51.120	-12.970	1.00	76.15	A3	ATOM 1336	CD2	LEU	210	43.050	42.453	24.303	1.00	51.37	B1
ATOM 1294	HE	ARG	170	47.245	51.528	-12.824	1.00	0.00	A3	ATOM 1337	C	LEU	210	46.770	44.374	24.596	1.00	50.98	B1
ATOM 1295	CZ	ARG	170	48.758	50.547	-11.970	1.00	76.14	A3	ATOM 1338	O	LEU	210	46.475	45.267	23.790	1.00	51.76	B1
ATOM 1296	NH1	ARG	170	49.973	50.017	-12.112	1.00	76.84	A3	ATOM 1339	HT1	LEU	210	44.382	44.922	24.421	1.00	0.00	B1
ATOM 1297	HH11	ARG	170	50.441	50.030	-12.994	1.00	0.00	A3	ATOM 1340	HT2	LEU	210	45.157	45.974	25.414	1.00	0.00	B1
ATOM 1298	HH12	ARG	170	50.406	49.570	-11.329	1.00	0.00	A3	ATOM 1341	N	LEU	210	44.705	45.041	25.406	1.00	53.59	B1
ATOM 1299	NH2	ARG	170	48.147	50.492	-10.806	1.00	77.02	A3	ATOM 1342	HT3	LEU	210	43.855	45.012	25.997	1.00	0.00	B1
ATOM 1300	HH21	ARG	170	47.237	50.890	-10.714	1.00	0.00	A3	ATOM 1343	CA	LEU	210	45.730	44.038	25.676	1.00	52.35	B1
ATOM 1301	HH22	ARG	170	48.586	50.052	-10.023	1.00	0.00	A3	ATOM 1344	N	PRO	211	47.974	43.825	24.494	1.00	49.35	B1
ATOM 1302	C	ARG	170	50.870	54.052	-15.647	1.00	79.84	A3	ATOM 1345	CD	PRO	211	48.621	43.024	25.532	1.00	49.52	B1
ATOM 1303	O	ARG	170	51.924	53.470	-15.908	1.00	80.07	A3	ATOM 1346	CA	PRO	211	48.895	44.191	23.419	1.00	49.04	B1
ATOM 1304	N	HIS	171	50.193	54.663	-16.611	1.00	81.38	A3	ATOM 1347	CB	PRO	211	50.209	43.571	23.865	1.00	49.02	B1
ATOM 1305	H	HIS	171	49.433	55.234	-16.359	1.00	0.00	A3	ATOM 1348	CG	PRO	211	49.794	42.438	24.783	1.00	49.77	B1
ATOM 1306	CA	HIS	171	50.663	54.597	-17.970	1.00	84.03	A3	ATOM 1349	C	PRO	211	48.543	43.864	21.965	1.00	48.05	B1
ATOM 1307	CB	HIS	171	49.590	55.054	-18.902	1.00	86.82	A3	ATOM 1350	O	PRO	211	47.872	42.896	21.622	1.00	46.52	B1
ATOM 1308	CG	HIS	171	48.496	54.037	-19.147	1.00	90.73	A3	ATOM 1351	N	GLN	212	49.032	44.675	21.051	1.00	46.52	B1
ATOM 1309	CD2	HIS	171	47.467	53.765	-18.272	1.00	91.35	A3	ATOM 1352	H	GLN	212	49.506	45.478	21.349	1.00	0.00	B1
ATOM 1310	ND1	HIS	171	48.308	53.301	-20.248	1.00	92.24	A3	ATOM 1353	CA	GLN	212	48.839	44.461	19.641	1.00	45.47	B1
ATOM 1311	HD1	HIS	171	48.887	53.287	-21.044	1.00	0.00	A3	ATOM 1354	CB	GLN	212	49.533	45.522	18.849	1.00	46.81	B1
ATOM 1312	CE1	HIS	171	47.204	52.605	-20.077	1.00	92.41	A3	ATOM 1355	CG	GLN	212	48.482	46.139	17.999	1.00	49.55	B1
ATOM 1313	NE2	HIS	171	46.711	52.892	-18.891	1.00	92.59	A3	ATOM 1356	CD	GLN	212	49.024	46.703	16.709	1.00	54.21	B1
ATOM 1314	HE2	HIS	171	45.884	52.511	-18.518	1.00	0.00	A3	ATOM 1357	OE1	GLN	212	48.429	47.672	16.232	1.00	57.72	B1
ATOM 1315	C	HIS	171	51.907	55.446	-18.232	1.00	85.42	A3	ATOM 1358	NE2	GLN	212	50.086	46.176	16.074	1.00	52.39	B1
ATOM 1316	O	HIS	171	52.440	55.352	-19.344	1.00	85.98	A3	ATOM 1359	HE21	GLN	212	50.530	45.383	16.430	1.00	0.00	B1
ATOM 1317	N	LEU	172	52.359	56.307	-17.302	1.00	86.13	A3	ATOM 1360	HE22	GLN	212	50.341	46.625	15.244	1.00	0.00	B1
ATOM 1318	H	LEU	172	51.870	56.411	-16.463	1.00	0.00	A3	ATOM 1361	C	GLN	212	49.390	43.133	19.185	1.00	44.79	B1
ATOM 1319	CA	LEU	172	53.550	57.133	-17.496	1.00	86.02	A3	ATOM 1362	O	GLN	212	48.959	42.520	18.208	1.00	44.01	B1
ATOM 1320	CB	LEU	172	53.500	58.357	-16.607	1.00	86.31	A3	ATOM 1363	N	SER	213	50.401	42.671	19.893	1.00	44.72	B1
ATOM 1321	CG	LEU	172	54.022	59.658	-17.203	1.00	87.48	A3	ATOM 1364	H	SER	213	50.730	43.115	20.698	1.00	0.00	B1
ATOM 1322	CD1	LEU	172	53.436	59.939	-18.596	1.00	87.68	A3	ATOM 1365	CA	SER	213	51.025	41.424	19.521	1.00	43.76	B1
ATOM 1323	CD2	LEU	172	53.645	60.778	-16.251	1.00	87.95	A3	ATOM 1366	CB	SER	213	52.220	41.124	20.354	1.00	45.29	B1
ATOM 1324	C	LEU	172	54.813	56.357	-17.180	1.00	85.92	A3	ATOM 1367	OG	SER	213	51.802	41.455	21.681	1.00	52.50	B1
ATOM 1325	O	LEU	172	55.896	56.660	-17.692	1.00	86.23	A3	ATOM 1368	HG	SER	213	52.479	41.127	22.288	1.00	0.00	B1
ATOM 1326	N	ALA	173	54.733	55.383	-16.282	1.00	85.49	A3	ATOM 1369	C	SER	213	50.014	40.376	19.784	1.00	40.92	B1
ATOM 1327	H	ALA	173	53.899	55.276	-15.769	1.00	0.00	A3	ATOM 1370	O	SER	213	49.964	39.492	18.947	1.00	43.32	B1
ATOM 1328	CA	ALA	173	55.856	54.497	-16.087	1.00	85.65	A3	ATOM 1371	N	PHE	214	49.242	40.571	20.876	1.00	38.86	B1
ATOM 1329	CB	ALA	173	56.602	54.859	-14.809	1.00	85.01	A3	ATOM 1372	H	PHE	214	49.414	41.370	21.410	1.00	0.00	B1
ATOM 1330	C	ALA	173	55.330	53.073	-16.008	1.00	86.54	A3	ATOM 1373	CA	PHE	214	48.210	39.664	21.336	1.00	37.40	B1
ATOM 1331	OT1	ALA	173	55.585	52.347	-16.971	1.00	87.21	A3	ATOM 1374	CB	PHE	214	47.568	40.064	22.634	1.00	37.45	B1
ATOM 1332	OT2	ALA	173	54.650	52.707	-15.036	1.00	87.31	A3	ATOM 1375	CG	PHE	214	46.494	39.080	23.035	1.00	41.01	B1

FIG. 5Q

ATOM 1376	CD1 PHE 214	45.176	39.459	23.044	1.00	42.77	BI	ATOM 1419	C CYS 218	43.766	36.189	16.652	1.00	32.89	BI
ATOM 1377	CD2 PHE 214	46.818	37.794	23.400	1.00	42.02	BI	ATOM 1420	O CYS 218	43.155	35.169	16.323	1.00	34.71	BI
ATOM 1378	CE1 PHE 214	44.197	38.554	23.423	1.00	41.82	BI	ATOM 1421	N LEU 219	44.035	37.169	15.777	1.00	29.52	BI
ATOM 1379	CE2 PHE 214	45.834	36.898	23.776	1.00	41.70	BI	ATOM 1422	H LEU 219	44.512	37.960	16.104	1.00	0.00	BI
ATOM 1380	CZ PHE 214	44.519	37.277	23.791	1.00	41.05	BI	ATOM 1423	CA LEU 219	43.614	37.119	14.393	1.00	27.44	BI
ATOM 1381	C PHE 214	47.109	39.656	20.321	1.00	36.54	BI	ATOM 1424	CB LEU 219	44.116	38.412	13.727	1.00	26.24	BI
ATOM 1382	O PHE 214	46.735	38.566	19.889	1.00	37.99	BI	ATOM 1425	CG LEU 219	43.884	38.768	12.241	1.00	25.07	BI
ATOM 1383	N LEU 215	46.616	40.812	19.893	1.00	33.27	BI	ATOM 1426	CD1 LEU 219	42.402	38.975	11.996	1.00	26.24	BI
ATOM 1384	H LEU 215	47.008	41.642	20.238	1.00	0.00	BI	ATOM 1427	CD2 LEU 219	44.563	40.051	11.882	1.00	22.10	BI
ATOM 1385	CA LEU 215	45.504	40.864	18.966	1.00	30.38	BI	ATOM 1428	C LEU 219	44.121	35.867	13.634	1.00	28.24	BI
ATOM 1386	CB LEU 215	45.099	42.282	18.701	1.00	31.82	BI	ATOM 1429	O LEU 219	43.373	35.204	12.889	1.00	27.12	BI
ATOM 1387	CG LEU 215	43.857	42.530	17.893	1.00	32.78	BI	ATOM 1430	N GLU 220	45.399	35.499	13.795	1.00	28.06	BI
ATOM 1388	CD1 LEU 215	42.727	41.963	18.737	1.00	32.95	BI	ATOM 1431	H GLU 220	45.957	35.974	14.448	1.00	0.00	BI
ATOM 1389	CD2 LEU 215	43.688	44.011	17.508	1.00	28.93	BI	ATOM 1432	CA GLU 220	45.963	34.411	13.048	1.00	28.38	BI
ATOM 1390	C LEU 215	45.811	40.232	17.648	1.00	29.57	BI	ATOM 1433	CB GLU 220	47.376	34.198	13.469	1.00	34.25	BI
ATOM 1391	O LEU 215	44.922	39.632	17.055	1.00	31.28	BI	ATOM 1434	CG GLU 220	48.049	33.079	12.666	1.00	46.36	BI
ATOM 1392	N LEU 216	47.031	40.379	17.155	1.00	29.44	BI	ATOM 1435	CD GLU 220	49.545	32.794	12.907	1.00	55.51	BI
ATOM 1393	H LEU 216	47.677	40.935	17.646	1.00	0.00	BI	ATOM 1436	OE1 GLU 220	50.113	32.133	12.021	1.00	58.95	BI
ATOM 1394	CA LEU 216	47.465	39.790	15.893	1.00	29.89	BI	ATOM 1437	OE2 GLU 220	50.144	33.213	13.930	1.00	60.41	BI
ATOM 1395	CB LEU 216	48.791	40.450	15.472	1.00	28.61	BI	ATOM 1438	C GLU 220	45.134	33.193	13.354	1.00	27.30	BI
ATOM 1396	CG LEU 216	48.682	41.877	14.939	1.00	26.83	BI	ATOM 1439	O GLU 220	44.662	32.524	12.437	1.00	27.08	BI
ATOM 1397	CD1 LEU 216	49.925	42.558	15.344	1.00	28.57	BI	ATOM 1440	N GLN 221	44.866	33.023	14.642	1.00	25.42	BI
ATOM 1398	CD2 LEU 216	48.446	41.950	13.452	1.00	24.09	BI	ATOM 1441	H GLN 221	45.229	33.687	15.268	1.00	0.00	BI
ATOM 1399	C LEU 216	47.613	38.274	16.062	1.00	31.23	BI	ATOM 1442	CA GLN 221	44.074	31.940	15.176	1.00	26.28	BI
ATOM 1400	O LEU 216	47.328	37.514	15.138	1.00	29.20	BI	ATOM 1443	CB GLN 221	44.143	31.927	16.691	1.00	26.78	BI
ATOM 1401	N LYS 217	47.999	37.826	17.261	1.00	32.50	BI	ATOM 1444	CG GLN 221	45.555	31.456	17.011	1.00	29.19	BI
ATOM 1402	H LYS 217	48.305	38.482	17.926	1.00	0.00	BI	ATOM 1445	CD GLN 221	45.752	31.067	18.442	1.00	31.98	BI
ATOM 1403	CA LYS 217	48.067	36.439	17.599	1.00	34.90	BI	ATOM 1446	OE1 GLN 221	46.472	30.162	18.808	1.00	35.98	BI
ATOM 1404	CB LYS 217	48.645	36.280	19.002	1.00	38.07	BI	ATOM 1447	NE2 GLN 221	45.110	31.736	19.347	1.00	39.31	BI
ATOM 1405	CG LYS 217	49.394	34.978	19.109	1.00	45.25	BI	ATOM 1448	HE21 GLN 221	45.263	31.423	20.246	1.00	0.00	BI
ATOM 1406	CD LYS 217	49.714	34.491	20.521	1.00	53.27	BI	ATOM 1449	HE22 GLN 221	44.571	32.514	19.111	1.00	0.00	BI
ATOM 1407	CE LYS 217	50.229	33.024	20.297	1.00	59.03	BI	ATOM 1450	C GLN 221	42.615	31.925	14.789	1.00	26.21	BI
ATOM 1408	NZ LYS 217	50.213	32.135	21.467	1.00	62.10	BI	ATOM 1451	O GLN 221	42.186	30.896	14.269	1.00	30.69	BI
ATOM 1409	HZ1 LYS 217	49.239	32.056	21.824	1.00	0.00	BI	ATOM 1452	N VAL 222	41.814	32.962	14.984	1.00	23.63	BI
ATOM 1410	HZ2 LYS 217	50.830	32.515	22.214	1.00	0.00	BI	ATOM 1453	H VAL 222	42.199	33.746	15.426	1.00	0.00	BI
ATOM 1411	HZ3 LYS 217	50.554	31.195	21.179	1.00	0.00	BI	ATOM 1454	CA VAL 222	40.429	33.034	14.537	1.00	21.92	BI
ATOM 1412	C LYS 217	46.617	35.950	17.546	1.00	36.77	BI	ATOM 1455	CB VAL 222	39.934	34.442	14.793	1.00	21.36	BI
ATOM 1413	O LYS 217	46.311	34.933	16.886	1.00	39.58	BI	ATOM 1456	CG1 VAL 222	38.706	34.831	14.027	1.00	17.72	BI
ATOM 1414	N CYS 218	45.664	36.638	18.177	1.00	34.86	BI	ATOM 1457	CG2 VAL 222	39.671	34.496	16.257	1.00	20.95	BI
ATOM 1415	H CYS 218	45.907	37.388	18.751	1.00	0.00	BI	ATOM 1458	C VAL 222	40.374	32.707	13.066	1.00	22.65	BI
ATOM 1416	CA CYS 218	44.277	36.238	18.076	1.00	33.61	BI	ATOM 1459	O VAL 222	39.475	32.013	12.632	1.00	23.72	BI
ATOM 1417	CB CYS 218	43.430	37.175	18.846	1.00	33.21	BI	ATOM 1460	N ARG 223	41.341	33.120	12.283	1.00	23.95	BI
ATOM 1418	SG CYS 218	43.856	36.710	20.515	1.00	35.92	BI	ATOM 1461	H ARG 223	42.099	33.614	12.666	1.00	0.00	BI

FIG. 5R

ATOM 1462	CA ARG	223	41.309	32.939	10.844	1.00	27.19	BI	ATOM 1505	OE1 GLN	226	37.158	34.281	10.076	1.00	36.34	BI
ATOM 1463	CB ARG	223	42.294	33.935	10.283	1.00	29.26	BI	ATOM 1506	NE2 GLN	226	35.359	34.114	11.421	1.00	39.62	BI
ATOM 1464	CG ARG	223	42.102	34.364	8.869	1.00	35.23	BI	ATOM 1507	HE21 GLN	226	34.823	33.501	11.971	1.00	0.00	BI
ATOM 1465	CD ARG	223	42.880	33.487	7.929	1.00	41.88	BI	ATOM 1508	HE22 GLN	226	35.153	35.057	11.287	1.00	0.00	BI
ATOM 1466	NE ARG	223	41.972	32.676	7.096	1.00	47.42	BI	ATOM 1509	C GLN	226	37.714	29.295	9.007	1.00	26.82	BI
ATOM 1467	HE ARG	223	41.451	31.953	7.502	1.00	0.00	BI	ATOM 1510	O GLN	226	36.775	28.887	8.325	1.00	27.45	BI
ATOM 1468	CZ ARG	223	41.875	32.896	5.784	1.00	46.15	BI	ATOM 1511	N GLY	227	38.940	29.186	8.570	1.00	26.55	BI
ATOM 1469	NH1 ARG	223	42.575	33.837	5.246	1.00	49.54	BI	ATOM 1512	H GLY	227	39.688	29.612	9.043	1.00	0.00	BI
ATOM 1470	HH11 ARG	223	42.522	33.989	4.259	1.00	0.00	BI	ATOM 1513	CA GLY	227	39.195	28.427	7.348	1.00	27.27	BI
ATOM 1471	HH12 ARG	223	43.156	34.428	5.805	1.00	0.00	BI	ATOM 1514	C GLY	227	38.832	26.949	7.574	1.00	27.65	BI
ATOM 1472	NH2 ARG	223	41.178	32.161	4.952	1.00	45.74	BI	ATOM 1515	O GLY	227	38.287	26.291	6.656	1.00	26.79	BI
ATOM 1473	HH21 ARG	223	40.697	31.353	5.290	1.00	0.00	BI	ATOM 1516	N ASP	228	39.025	26.429	8.819	1.00	27.03	BI
ATOM 1474	HH22 ARG	223	41.154	32.399	3.980	1.00	0.00	BI	ATOM 1517	H ASP	228	39.460	26.957	9.523	1.00	0.00	BI
ATOM 1475	C ARG	223	41.624	31.492	10.430	1.00	29.13	BI	ATOM 1518	CA ASP	228	38.618	25.038	9.052	1.00	28.20	BI
ATOM 1476	O ARG	223	41.181	30.987	9.376	1.00	29.32	BI	ATOM 1519	CB ASP	228	38.986	24.492	10.391	1.00	26.04	BI
ATOM 1477	N LYS	224	42.413	30.791	11.259	1.00	29.17	BI	ATOM 1520	CG ASP	228	40.427	24.554	10.774	1.00	24.88	BI
ATOM 1478	H LYS	224	42.791	31.235	12.048	1.00	0.00	BI	ATOM 1521	OD1 ASP	228	40.627	24.521	11.977	1.00	23.37	BI
ATOM 1479	CA LYS	224	42.714	29.411	10.994	1.00	27.70	BI	ATOM 1522	OD2 ASP	228	41.302	24.637	9.912	1.00	23.32	BI
ATOM 1480	CB LYS	224	43.922	29.085	11.818	1.00	30.07	BI	ATOM 1523	C ASP	228	37.120	24.830	8.992	1.00	27.23	BI
ATOM 1481	CG LYS	224	44.372	27.660	11.706	1.00	36.70	BI	ATOM 1524	O ASP	228	36.662	23.900	8.336	1.00	27.07	BI
ATOM 1482	CD LYS	224	45.829	27.544	12.127	1.00	41.68	BI	ATOM 1525	N GLY	229	36.390	25.739	9.639	1.00	26.74	BI
ATOM 1483	CE LYS	224	46.303	26.478	11.131	1.00	48.18	BI	ATOM 1526	H GLY	229	36.861	26.444	10.134	1.00	0.00	BI
ATOM 1484	NZ LYS	224	47.750	26.492	10.913	1.00	53.57	BI	ATOM 1527	CA GLY	229	34.946	25.723	9.673	1.00	25.87	BI
ATOM 1485	HZ1 LYS	224	48.230	26.241	11.801	1.00	0.00	BI	ATOM 1528	C GLY	229	34.393	25.825	8.274	1.00	24.95	BI
ATOM 1486	HZ2 LYS	224	48.057	27.436	10.606	1.00	0.00	BI	ATOM 1529	O GLY	229	33.370	25.222	7.956	1.00	25.73	BI
ATOM 1487	HZ3 LYS	224	47.998	25.792	10.183	1.00	0.00	BI	ATOM 1530	N ALA	230	35.058	26.541	7.391	1.00	23.97	BI
ATOM 1488	C LYS	224	41.464	28.598	11.347	1.00	26.27	BI	ATOM 1531	H ALA	230	35.871	27.026	7.654	1.00	0.00	BI
ATOM 1489	O LYS	224	40.970	27.810	10.510	1.00	24.82	BI	ATOM 1532	CA ALA	230	34.530	26.688	6.061	1.00	25.94	BI
ATOM 1490	N ILE	225	40.892	28.835	12.547	1.00	24.75	BI	ATOM 1533	CB ALA	230	35.193	27.852	5.312	1.00	19.76	BI
ATOM 1491	H ILE	225	41.308	29.487	13.151	1.00	0.00	BI	ATOM 1534	C ALA	230	34.794	25.403	5.304	1.00	29.42	BI
ATOM 1492	CA ILE	225	39.656	28.147	12.943	1.00	23.33	BI	ATOM 1535	O ALA	230	34.014	25.061	4.423	1.00	32.07	BI
ATOM 1493	CB ILE	225	39.146	28.622	14.296	1.00	18.08	BI	ATOM 1536	N ALA	231	35.878	24.671	5.572	1.00	32.16	BI
ATOM 1494	CG2 ILE	225	37.874	27.872	14.577	1.00	15.43	BI	ATOM 1537	H ALA	231	36.556	25.045	6.175	1.00	0.00	BI
ATOM 1495	CG1 ILE	225	40.161	28.400	15.380	1.00	13.38	BI	ATOM 1538	CA ALA	231	36.141	23.364	4.957	1.00	31.99	BI
ATOM 1496	CD ILE	225	39.787	28.967	16.749	1.00	13.59	BI	ATOM 1539	CB ALA	231	37.489	22.847	5.428	1.00	32.77	BI
ATOM 1497	C ILE	225	38.594	28.437	11.889	1.00	27.28	BI	ATOM 1540	C ALA	231	35.060	22.361	5.386	1.00	32.99	BI
ATOM 1498	O ILE	225	37.978	27.492	11.400	1.00	31.49	BI	ATOM 1541	O ALA	231	34.599	21.575	4.576	1.00	34.12	BI
ATOM 1499	N GLN	226	38.396	29.677	11.402	1.00	29.69	BI	ATOM 1542	N LEU	232	34.662	22.309	6.652	1.00	33.30	BI
ATOM 1500	H GLN	226	38.894	30.413	11.803	1.00	0.00	BI	ATOM 1543	H LEU	232	35.174	22.861	7.284	1.00	0.00	BI
ATOM 1501	CA GLN	226	37.450	29.969	10.313	1.00	29.12	BI	ATOM 1544	CA LEU	232	33.558	21.506	7.165	1.00	35.33	BI
ATOM 1502	CB GLN	226	37.366	31.438	9.962	1.00	32.26	BI	ATOM 1545	CB LEU	232	33.279	21.783	8.626	1.00	34.22	BI
ATOM 1503	CG GLN	226	36.682	32.156	11.108	1.00	36.28	BI	ATOM 1546	CG LEU	232	32.410	20.861	9.394	1.00	33.16	BI
ATOM 1504	CD GLN	226	36.429	33.613	10.816	1.00	37.88	BI	ATOM 1547	CD1 LEU	232	33.191	19.545	9.451	1.00	34.59	BI

FIG. 5S

ATOM 1548	CD2 LEU 232	32.107	21.381	10.800	1.00	31.32	BI	ATOM 1591	CD1 LEU 236	28.703	20.460	8.268	1.00	24.14	BI
ATOM 1549	C LEU 232	32.271	21.829	6.440	1.00	36.65	BI	ATOM 1592	CD2 LEU 236	28.132	18.163	7.587	1.00	26.66	BI
ATOM 1550	O LEU 232	31.703	20.986	5.749	1.00	36.42	BI	ATOM 1593	C LEU 236	27.590	19.574	3.453	1.00	33.69	BI
ATOM 1551	N GLN 233	31.836	23.084	6.570	1.00	38.89	BI	ATOM 1594	O LEU 236	26.691	18.849	3.064	1.00	35.13	BI
ATOM 1552	H GLN 233	32.378	23.719	7.087	1.00	0.00	BI	ATOM 1595	N CYS 237	27.870	20.670	2.753	1.00	34.49	BI
ATOM 1553	CA GLN 233	30.637	23.579	5.933	1.00	40.02	BI	ATOM 1596	H CYS 237	28.611	21.251	3.025	1.00	0.00	BI
ATOM 1554	CB GLN 233	30.572	25.072	6.162	1.00	42.25	BI	ATOM 1597	CA CYS 237	27.064	21.016	1.606	1.00	34.95	BI
ATOM 1555	CG GLN 233	30.290	25.398	7.626	1.00	48.22	BI	ATOM 1598	C CYS 237	27.324	20.090	0.451	1.00	35.97	BI
ATOM 1556	CD GLN 233	30.021	26.879	7.983	1.00	53.75	BI	ATOM 1599	O CYS 237	26.360	19.573	-0.089	1.00	36.09	BI
ATOM 1557	OE1 GLN 233	30.799	27.810	7.718	1.00	55.93	BI	ATOM 1600	CB CYS 237	27.334	22.413	1.130	1.00	35.18	BI
ATOM 1558	NE2 GLN 233	28.909	27.215	8.634	1.00	56.51	BI	ATOM 1601	SG CYS 237	26.409	22.880	-0.365	1.00	36.40	BI
ATOM 1559	HE21 GLN 233	28.810	28.144	8.902	1.00	0.00	BI	ATOM 1602	N ALA 238	28.571	19.804	0.074	1.00	37.29	BI
ATOM 1560	HE22 GLN 233	28.205	26.533	8.710	1.00	0.00	BI	ATOM 1603	H ALA 238	29.324	20.158	0.591	1.00	0.00	BI
ATOM 1561	C GLN 233	30.635	23.243	4.441	1.00	39.70	BI	ATOM 1604	CA ALA 238	28.841	18.973	-1.090	1.00	36.80	BI
ATOM 1562	O GLN 233	29.631	22.777	3.898	1.00	40.20	BI	ATOM 1605	CB ALA 238	30.274	18.684	-1.403	1.00	37.35	BI
ATOM 1563	N GLU 234	31.744	23.377	3.736	1.00	39.32	BI	ATOM 1606	C ALA 238	28.320	17.617	-0.911	1.00	36.49	BI
ATOM 1564	H GLU 234	32.544	23.750	4.163	1.00	0.00	BI	ATOM 1607	O ALA 238	27.645	17.198	-1.809	1.00	36.54	BI
ATOM 1565	CA GLU 234	31.809	23.025	2.329	1.00	39.23	BI	ATOM 1608	N THR 239	28.628	16.969	0.193	1.00	38.80	BI
ATOM 1566	CB GLU 234	33.155	23.434	1.811	1.00	40.25	BI	ATOM 1609	H THR 239	29.236	17.391	0.821	1.00	0.00	BI
ATOM 1567	CG GLU 234	33.292	23.028	0.383	1.00	47.69	BI	ATOM 1610	CA THR 239	28.230	15.587	0.464	1.00	41.33	BI
ATOM 1568	CD GLU 234	34.733	23.056	-0.073	1.00	53.40	BI	ATOM 1611	CB THR 239	29.158	15.035	1.554	1.00	42.38	BI
ATOM 1569	OE1 GLU 234	34.986	23.721	-1.100	1.00	53.78	BI	ATOM 1612	OG1 THR 239	30.473	15.265	1.031	1.00	45.70	BI
ATOM 1570	OE2 GLU 234	35.568	22.400	0.590	1.00	57.55	BI	ATOM 1613	HG1 THR 239	31.019	15.668	1.709	1.00	0.00	BI
ATOM 1571	C GLU 234	31.580	21.535	2.136	1.00	37.09	BI	ATOM 1614	CG2 THR 239	28.936	13.574	1.916	1.00	41.85	BI
ATOM 1572	O GLU 234	30.884	21.217	1.188	1.00	36.67	BI	ATOM 1615	C THR 239	26.771	15.341	0.864	1.00	41.94	BI
ATOM 1573	N LYS 235	32.092	20.623	2.986	1.00	37.27	BI	ATOM 1616	O THR 239	26.260	14.284	0.460	1.00	43.34	BI
ATOM 1574	H LYS 235	32.668	20.965	3.706	1.00	0.00	BI	ATOM 1617	N TYR 240	26.095	16.207	1.669	1.00	40.07	BI
ATOM 1575	CA LYS 235	31.832	19.177	2.942	1.00	36.27	BI	ATOM 1618	H TYR 240	26.538	17.034	1.953	1.00	0.00	BI
ATOM 1576	CB LYS 235	32.516	18.365	3.997	1.00	34.92	BI	ATOM 1619	CA TYR 240	24.718	15.992	2.084	1.00	38.21	BI
ATOM 1577	CG LYS 235	33.978	18.483	4.107	1.00	38.47	BI	ATOM 1620	CB TYR 240	24.594	15.993	3.618	1.00	38.08	BI
ATOM 1578	CD LYS 235	34.762	17.999	2.921	1.00	38.07	BI	ATOM 1621	CG TYR 240	25.524	14.926	4.193	1.00	43.37	BI
ATOM 1579	CE LYS 235	36.192	18.051	3.460	1.00	39.15	BI	ATOM 1622	CD1 TYR 240	26.475	15.243	5.149	1.00	45.06	BI
ATOM 1580	NZ LYS 235	37.117	17.460	2.521	1.00	41.34	BI	ATOM 1623	CE1 TYR 240	27.420	14.283	5.529	1.00	47.35	BI
ATOM 1581	HZ1 LYS 235	37.080	17.978	1.622	1.00	0.00	BI	ATOM 1624	CD2 TYR 240	25.518	13.643	3.641	1.00	43.89	BI
ATOM 1582	HZ2 LYS 235	36.854	16.466	2.363	1.00	0.00	BI	ATOM 1625	CE2 TYR 240	26.442	12.690	4.003	1.00	44.77	BI
ATOM 1583	HZ3 LYS 235	38.080	17.497	2.911	1.00	0.00	BI	ATOM 1626	CZ TYR 240	27.410	13.005	4.943	1.00	47.96	BI
ATOM 1584	C LYS 235	30.363	18.847	3.204	1.00	35.20	BI	ATOM 1627	OH TYR 240	28.390	12.047	5.244	1.00	46.59	BI
ATOM 1585	O LYS 235	29.722	18.102	2.463	1.00	35.60	BI	ATOM 1628	HH TYR 240	28.027	11.187	4.992	1.00	0.00	BI
ATOM 1586	N LEU 236	29.807	19.332	4.301	1.00	33.53	BI	ATOM 1629	C TYR 240	23.781	17.032	1.516	1.00	39.49	BI
ATOM 1587	H LEU 236	30.363	19.888	4.885	1.00	0.00	BI	ATOM 1630	O TYR 240	22.587	16.934	1.775	1.00	42.76	BI
ATOM 1588	CA LEU 236	28.417	19.116	4.641	1.00	32.30	BI	ATOM 1631	N LYS 241	24.174	18.011	0.694	1.00	37.36	BI
ATOM 1589	CB LEU 236	28.093	19.918	5.894	1.00	28.85	BI	ATOM 1632	H LYS 241	25.091	18.023	0.345	1.00	0.00	BI
ATOM 1590	CG LEU 236	28.791	19.441	7.148	1.00	28.23	BI	ATOM 1633	CA LYS 241	23.314	19.115	0.275	1.00	36.37	BI

FIG. 5T

ATOM 1634	CB LYS 241	22.173	18.648	-0.595	1.00	38.38	BI	ATOM 1677	CG PRO 245	24.564	27.549	7.428	1.00	31.74	BI
ATOM 1635	CG LYS 241	22.645	17.940	-1.838	1.00	42.94	BI	ATOM 1678	C PRO 245	21.032	27.470	8.407	1.00	36.26	BI
ATOM 1636	CD LYS 241	23.468	18.809	-2.737	1.00	46.97	BI	ATOM 1679	O PRO 245	20.478	26.878	9.315	1.00	38.13	BI
ATOM 1637	CE LYS 241	23.657	18.070	-4.051	1.00	49.20	BI	ATOM 1680	N GLU 246	20.529	28.463	7.640	1.00	39.64	BI
ATOM 1638	NE LYS 241	22.509	18.372	-4.893	1.00	51.54	BI	ATOM 1681	H GLU 246	21.134	28.747	6.934	1.00	0.00	BI
ATOM 1639	HZ1 LYS 241	22.447	19.400	-5.038	1.00	0.00	BI	ATOM 1682	CA GLU 246	19.257	29.229	7.711	1.00	41.10	BI
ATOM 1640	HZ2 LYS 241	21.641	18.041	-4.426	1.00	0.00	BI	ATOM 1683	CB GLU 246	19.044	30.107	6.438	1.00	43.15	BI
ATOM 1641	HZ3 LYS 241	22.609	17.895	-5.811	1.00	0.00	BI	ATOM 1684	CG GLU 246	20.256	30.918	5.944	1.00	47.07	BI
ATOM 1642	C LYS 241	22.720	19.904	1.429	1.00	33.37	BI	ATOM 1685	CD GLU 246	20.813	30.539	4.558	1.00	52.63	BI
ATOM 1643	O LYS 241	21.728	20.580	1.223	1.00	33.90	BI	ATOM 1686	OE1 GLU 246	22.054	30.545	4.374	1.00	54.22	BI
ATOM 1644	N LEU 242	23.286	19.853	2.648	1.00	31.40	BI	ATOM 1687	OE2 GLU 246	20.002	30.250	3.656	1.00	53.39	BI
ATOM 1645	H LEU 242	24.055	19.260	2.756	1.00	0.00	BI	ATOM 1688	C GLU 246	18.071	28.298	7.819	1.00	40.57	BI
ATOM 1646	CA LEU 242	22.904	20.682	3.758	1.00	31.09	BI	ATOM 1689	O GLU 246	17.308	28.338	8.791	1.00	39.90	BI
ATOM 1647	CB LEU 242	23.253	20.059	5.096	1.00	28.55	BI	ATOM 1690	N GLU 247	18.025	27.388	6.840	1.00	40.32	BI
ATOM 1648	CG LEU 242	22.571	18.798	5.641	1.00	30.36	BI	ATOM 1691	H GLU 247	18.750	27.334	6.190	1.00	0.00	BI
ATOM 1649	CD1 LEU 242	22.530	18.814	7.138	1.00	29.62	BI	ATOM 1692	CA GLU 247	17.001	26.347	6.830	1.00	40.76	BI
ATOM 1650	CD2 LEU 242	21.086	18.861	5.443	1.00	31.94	BI	ATOM 1693	CB GLU 247	17.139	25.423	5.642	1.00	44.03	BI
ATOM 1651	C LEU 242	23.778	21.933	3.550	1.00	34.03	BI	ATOM 1694	CG GLU 247	16.830	26.240	4.400	1.00	48.54	BI
ATOM 1652	O LEU 242	24.903	22.027	4.058	1.00	35.53	BI	ATOM 1695	CD GLU 247	17.163	25.628	3.050	1.00	50.24	BI
ATOM 1653	N CYS 243	23.316	22.883	2.722	1.00	34.89	BI	ATOM 1696	OE1 GLU 247	16.849	26.299	2.056	1.00	52.92	BI
ATOM 1654	H CYS 243	22.491	22.665	2.238	1.00	0.00	BI	ATOM 1697	OE2 GLU 247	17.744	24.533	2.987	1.00	50.84	BI
ATOM 1655	CA CYS 243	24.051	24.083	2.377	1.00	35.42	BI	ATOM 1698	C GLU 247	16.966	25.444	8.034	1.00	39.24	BI
ATOM 1656	C CYS 243	23.492	25.335	2.975	1.00	36.85	BI	ATOM 1699	O GLU 247	15.915	24.888	8.329	1.00	39.40	BI
ATOM 1657	O CYS 243	23.956	26.400	2.565	1.00	40.10	BI	ATOM 1700	N LEU 248	18.066	25.280	8.760	1.00	37.92	BI
ATOM 1658	CB CYS 243	24.046	24.383	0.929	1.00	33.12	BI	ATOM 1701	H LEU 248	18.864	25.814	8.576	1.00	0.00	BI
ATOM 1659	SG CYS 243	24.438	22.883	0.099	1.00	38.25	BI	ATOM 1702	CA LEU 248	18.101	24.338	9.858	1.00	35.75	BI
ATOM 1660	N HIS 244	22.496	25.393	3.848	1.00	35.37	BI	ATOM 1703	CB LEU 248	19.458	23.623	9.796	1.00	34.13	BI
ATOM 1661	H HIS 244	22.185	24.588	4.318	1.00	0.00	BI	ATOM 1704	CG LEU 248	19.669	22.866	8.430	1.00	34.00	BI
ATOM 1662	CA HIS 244	21.939	26.676	4.191	1.00	33.29	BI	ATOM 1705	CD1 LEU 248	20.997	22.149	8.306	1.00	33.97	BI
ATOM 1663	CB HIS 244	20.655	26.987	3.340	1.00	33.64	BI	ATOM 1706	CD2 LEU 248	18.620	21.810	8.322	1.00	32.33	BI
ATOM 1664	CG HIS 244	20.915	27.205	1.857	1.00	33.12	BI	ATOM 1707	C LEU 248	17.871	25.031	11.155	1.00	36.51	BI
ATOM 1665	CD2 HIS 244	20.288	26.584	0.814	1.00	37.29	BI	ATOM 1708	O LEU 248	17.736	24.370	12.186	1.00	36.31	BI
ATOM 1666	ND1 HIS 244	21.874	27.902	1.298	1.00	36.85	BI	ATOM 1709	N VAL 249	17.663	26.350	11.146	1.00	38.88	BI
ATOM 1667	HD1 HIS 244	22.648	28.281	1.778	1.00	0.00	BI	ATOM 1710	H VAL 249	17.566	26.810	10.283	1.00	0.00	BI
ATOM 1668	CE1 HIS 244	21.874	27.722	-0.013	1.00	35.95	BI	ATOM 1711	CA VAL 249	17.573	27.133	12.371	1.00	41.39	BI
ATOM 1669	NE2 HIS 244	20.910	26.920	-0.301	1.00	35.54	BI	ATOM 1712	CB VAL 249	17.265	28.640	12.020	1.00	43.72	BI
ATOM 1670	HE2 HIS 244	20.616	26.706	-1.214	1.00	0.00	BI	ATOM 1713	CG1 VAL 249	15.804	28.985	11.776	1.00	44.70	BI
ATOM 1671	C HIS 244	21.621	26.565	5.650	1.00	33.38	BI	ATOM 1714	CG2 VAL 249	17.702	29.434	13.214	1.00	45.20	BI
ATOM 1672	O HIS 244	20.546	26.105	6.029	1.00	33.23	BI	ATOM 1715	C VAL 249	16.590	26.635	13.406	1.00	42.61	BI
ATOM 1673	N PRO 245	22.539	27.018	6.499	1.00	33.21	BI	ATOM 1716	O VAL 249	16.912	26.716	14.594	1.00	44.77	BI
ATOM 1674	CD PRO 245	23.851	27.524	6.099	1.00	31.29	BI	ATOM 1717	N LEU 250	15.453	26.035	13.016	1.00	43.61	BI
ATOM 1675	CA PRO 245	22.373	26.979	7.948	1.00	34.16	BI	ATOM 1718	H LEU 250	15.319	25.919	12.053	1.00	0.00	BI
ATOM 1676	CB PRO 245	23.490	27.799	8.467	1.00	32.85	BI	ATOM 1719	CA LEU 250	14.457	25.537	13.987	1.00	43.96	BI

FIG. 5U

ATOM 1720	CB LEU 250	13.102	25.296	13.373	1.00	43.88	BI	ATOM 1763	CA LEU 255	18.913	19.272	18.723	1.00	46.02	BI
ATOM 1721	CG LEU 250	12.729	26.281	12.313	1.00	47.04	BI	ATOM 1764	CB LEU 255	19.706	19.723	17.537	1.00	44.66	BI
ATOM 1722	CD1 LEU 250	13.092	25.577	11.011	1.00	47.30	BI	ATOM 1765	CG LEU 255	19.362	18.968	16.274	1.00	44.51	BI
ATOM 1723	CD2 LEU 250	11.286	26.772	12.441	1.00	46.18	BI	ATOM 1766	CD1 LEU 255	19.810	19.679	15.006	1.00	43.16	BI
ATOM 1724	C LEU 250	14.852	24.207	14.626	1.00	43.96	BI	ATOM 1767	CD2 LEU 255	19.969	17.604	16.456	1.00	44.67	BI
ATOM 1725	O LEU 250	14.450	23.887	15.764	1.00	44.07	BI	ATOM 1768	C LEU 255	19.536	19.718	20.012	1.00	46.56	BI
ATOM 1726	N LEU 251	15.691	23.446	13.893	1.00	42.41	BI	ATOM 1769	O LEU 255	20.565	19.174	20.440	1.00	46.82	BI
ATOM 1727	H LEU 251	16.049	23.788	13.048	1.00	0.00	BI	ATOM 1770	N GLY 256	18.918	20.759	20.581	1.00	45.93	BI
ATOM 1728	CA LEU 251	16.155	22.159	14.362	1.00	40.63	BI	ATOM 1771	H GLY 256	18.210	21.225	20.101	1.00	0.00	BI
ATOM 1729	CB LEU 251	16.834	21.418	13.257	1.00	36.17	BI	ATOM 1772	CA GLY 256	19.277	21.273	21.890	1.00	46.68	BI
ATOM 1730	CG LEU 251	15.996	20.629	12.267	1.00	33.16	BI	ATOM 1773	C GLY 256	20.669	21.866	21.970	1.00	47.28	BI
ATOM 1731	CD1 LEU 251	14.595	21.168	11.956	1.00	33.36	BI	ATOM 1774	O GLY 256	21.273	21.844	23.056	1.00	49.64	BI
ATOM 1732	CD2 LEU 251	16.875	20.619	11.050	1.00	34.71	BI	ATOM 1775	N ILE 257	21.143	22.441	20.849	1.00	45.74	BI
ATOM 1733	C LEU 251	17.104	22.372	15.493	1.00	42.78	BI	ATOM 1776	H ILE 257	20.497	22.589	20.128	1.00	0.00	BI
ATOM 1734	O LEU 251	17.124	21.554	16.395	1.00	45.44	BI	ATOM 1777	CA ILE 257	22.481	23.017	20.726	1.00	43.64	BI
ATOM 1735	N GLY 252	17.826	23.477	15.610	1.00	44.86	BI	ATOM 1778	CB ILE 257	22.684	23.363	19.257	1.00	42.54	BI
ATOM 1736	H GLY 252	17.750	24.160	14.910	1.00	0.00	BI	ATOM 1779	CG2 ILE 257	23.988	24.110	19.073	1.00	41.05	BI
ATOM 1737	CA GLY 252	18.734	23.711	16.719	1.00	46.68	BI	ATOM 1780	CG1 ILE 257	22.694	22.088	18.437	1.00	40.55	BI
ATOM 1738	C GLY 252	18.071	23.596	18.067	1.00	49.18	BI	ATOM 1781	CD ILE 257	22.452	22.468	16.970	1.00	39.49	BI
ATOM 1739	O GLY 252	18.709	23.318	19.077	1.00	49.23	BI	ATOM 1782	C ILE 257	22.559	24.246	21.616	1.00	43.27	BI
ATOM 1740	N HIS 253	16.756	23.787	18.046	1.00	53.74	BI	ATOM 1783	O ILE 257	21.706	25.110	21.450	1.00	43.22	BI
ATOM 1741	H HIS 253	16.358	24.055	17.190	1.00	0.00	BI	ATOM 1784	N PRO 258	23.441	24.392	22.608	1.00	43.05	BI
ATOM 1742	CA HIS 253	15.859	23.649	19.197	1.00	57.46	BI	ATOM 1785	CD PRO 258	24.133	23.321	23.296	1.00	43.29	BI
ATOM 1743	CB HIS 253	14.468	24.157	18.764	1.00	62.93	BI	ATOM 1786	CA PRO 258	23.559	25.616	23.360	1.00	43.82	BI
ATOM 1744	CG HIS 253	13.212	23.813	19.577	1.00	68.75	BI	ATOM 1787	CB PRO 258	24.295	25.236	24.612	1.00	41.97	BI
ATOM 1745	CD2 HIS 253	12.031	24.529	19.414	1.00	71.00	BI	ATOM 1788	CG PRO 258	25.107	24.064	24.186	1.00	43.79	BI
ATOM 1746	ND1 HIS 253	12.980	22.854	20.479	1.00	70.67	BI	ATOM 1789	C PRO 258	24.252	26.703	22.555	1.00	46.06	BI
ATOM 1747	HD1 HIS 253	13.627	22.193	20.830	1.00	0.00	BI	ATOM 1790	O PRO 258	24.983	26.513	21.560	1.00	46.59	BI
ATOM 1748	CE1 HIS 253	11.723	22.966	20.845	1.00	73.40	BI	ATOM 1791	N TRP 259	23.996	27.887	23.106	1.00	46.75	BI
ATOM 1749	NE2 HIS 253	11.156	23.973	20.204	1.00	72.91	BI	ATOM 1792	H TRP 259	23.588	27.921	23.994	1.00	0.00	BI
ATOM 1750	HE2 HIS 253	10.218	24.260	20.311	1.00	0.00	BI	ATOM 1793	CA TRP 259	24.427	29.143	22.517	1.00	45.77	BI
ATOM 1751	C HIS 253	15.771	22.209	19.691	1.00	56.06	BI	ATOM 1794	CB TRP 259	23.213	30.071	22.397	1.00	46.60	BI
ATOM 1752	O HIS 253	15.880	21.827	20.857	1.00	56.17	BI	ATOM 1795	CG TRP 259	23.556	31.372	21.749	1.00	47.51	BI
ATOM 1753	N SER 254	15.395	21.435	18.724	1.00	53.46	BI	ATOM 1796	CE2 TRP 259	23.860	31.525	20.430	1.00	47.83	BI
ATOM 1754	H SER 254	15.278	21.783	17.813	1.00	0.00	BI	ATOM 1797	CD2 TRP 259	24.154	32.888	20.392	1.00	48.47	BI
ATOM 1755	CA SER 254	15.177	20.034	18.898	1.00	52.61	BI	ATOM 1798	CE3 TRP 259	23.940	30.745	19.290	1.00	47.39	BI
ATOM 1756	CB SER 254	14.613	19.595	17.576	1.00	53.04	BI	ATOM 1799	CD1 TRP 259	23.639	32.520	22.493	1.00	48.60	BI
ATOM 1757	OG SER 254	13.793	20.686	17.158	1.00	56.04	BI	ATOM 1800	NE1 TRP 259	24.013	33.421	21.628	1.00	48.27	BI
ATOM 1758	HG SER 254	13.369	20.467	16.319	1.00	0.00	BI	ATOM 1801	HE1 TRP 259	24.224	34.344	21.870	1.00	0.00	BI
ATOM 1759	C SER 254	16.512	19.386	19.275	1.00	51.48	BI	ATOM 1802	CZ2 TRP 259	24.531	33.486	19.195	1.00	47.40	BI
ATOM 1760	O SER 254	16.596	18.639	20.245	1.00	51.90	BI	ATOM 1803	CZ3 TRP 259	24.317	31.344	18.097	1.00	49.07	BI
ATOM 1761	N LEU 255	17.577	19.790	18.562	1.00	49.31	BI	ATOM 1804	CH2 TRP 259	24.613	32.706	18.050	1.00	49.12	BI
ATOM 1762	H LEU 255	17.430	20.480	17.889	1.00	0.00	BI	ATOM 1805	C TRP 259	25.459	29.727	23.440	1.00	44.01	BI

FIG. 5V

ATOM 1806 O TRP 259	25.340	29.664	24.671	1.00	43.25	B1	ATOM 1849 SG CYS 265	32.322	40.638	27.504	1.00	71.40	B1
ATOM 1807 N ALA 260	26.469	30.247	22.777	1.00	43.01	B1	ATOM 1850 C CYS 265	30.667	42.860	26.515	1.00	63.12	B1
ATOM 1808 H ALA 260	26.523	30.198	21.796	1.00	0.00	B1	ATOM 1851 OT1 CYS 265	31.065	43.360	25.444	1.00	63.44	B1
ATOM 1809 CA ALA 260	27.493	30.973	23.482	1.00	43.48	B1	ATOM 1852 OT2 CYS 265	30.809	43.408	27.610	1.00	61.72	B1
ATOM 1810 CB ALA 260	28.874	30.549	22.969	1.00	43.33	B1	ATOM 1853 CB ALA 272	40.020	43.327	30.788	1.00	77.44	B2
ATOM 1811 C ALA 260	27.249	32.486	23.216	1.00	43.41	B1	ATOM 1854 C ALA 272	38.698	41.201	30.601	1.00	76.53	B2
ATOM 1812 O ALA 260	27.315	32.946	22.054	1.00	40.55	B1	ATOM 1855 O ALA 272	37.525	40.873	30.361	1.00	76.81	B2
ATOM 1813 N PRO 261	26.853	33.267	24.253	1.00	42.61	B1	ATOM 1856 HT1 ALA 272	37.486	43.550	30.261	1.00	0.00	B2
ATOM 1814 CD PRO 261	26.527	32.807	25.606	1.00	42.33	B1	ATOM 1857 HT2 ALA 272	37.357	42.450	28.996	1.00	0.00	B2
ATOM 1815 CA PRO 261	26.720	34.701	24.199	1.00	42.37	B1	ATOM 1858 N ALA 272	37.973	43.169	29.427	1.00	76.81	B2
ATOM 1816 CB PRO 261	25.778	34.987	25.335	1.00	41.46	B1	ATOM 1859 HT3 ALA 272	38.195	43.924	28.752	1.00	0.00	B2
ATOM 1817 CG PRO 261	26.251	34.060	26.411	1.00	40.00	B1	ATOM 1860 CA ALA 272	39.176	42.460	29.853	1.00	77.02	B2
ATOM 1818 C PRO 261	28.087	35.369	24.311	1.00	42.22	B1	ATOM 1861 N ALA 273	39.485	40.547	31.487	1.00	74.93	B2
ATOM 1819 O PRO 261	28.988	34.956	25.037	1.00	38.82	B1	ATOM 1862 H ALA 273	40.334	40.963	31.745	1.00	0.00	B2
ATOM 1820 N LEU 262	28.234	36.403	23.486	1.00	45.20	B1	ATOM 1863 CA ALA 273	39.244	39.241	32.119	1.00	72.64	B2
ATOM 1821 H LEU 262	27.513	36.610	22.853	1.00	0.00	B1	ATOM 1864 CB ALA 273	39.704	39.279	33.558	1.00	71.92	B2
ATOM 1822 CA LEU 262	29.434	37.210	23.498	1.00	46.50	B1	ATOM 1865 C ALA 273	37.872	38.599	32.118	1.00	71.60	B2
ATOM 1823 CB LEU 262	30.531	36.609	22.610	1.00	45.09	B1	ATOM 1866 O ALA 273	37.806	37.458	31.702	1.00	71.68	B2
ATOM 1824 CG LEU 262	31.903	37.157	22.964	1.00	42.55	B1	ATOM 1867 N GLY 274	36.775	39.282	32.484	1.00	70.20	B2
ATOM 1825 CD1 LEU 262	32.344	36.695	24.338	1.00	41.52	B1	ATOM 1868 H GLY 274	36.903	40.167	32.874	1.00	0.00	B2
ATOM 1826 CD2 LEU 262	32.850	36.730	21.900	1.00	44.21	B1	ATOM 1869 CA GLY 274	35.412	38.758	32.425	1.00	66.78	B2
ATOM 1827 C LEU 262	29.154	38.628	23.035	1.00	48.56	B1	ATOM 1870 C GLY 274	35.050	38.437	30.990	1.00	65.05	B2
ATOM 1828 O LEU 262	29.633	39.470	23.790	1.00	48.23	B1	ATOM 1871 O GLY 274	34.627	37.320	30.709	1.00	66.44	B2
ATOM 1829 N SER 263	28.388	38.956	21.960	1.00	51.33	B1	ATOM 1872 N CYS 275	35.301	39.364	30.048	1.00	62.77	B2
ATOM 1830 H SER 263	27.982	38.242	21.427	1.00	0.00	B1	ATOM 1873 H CYS 275	35.634	40.223	30.357	1.00	0.00	B2
ATOM 1831 CA SER 263	28.127	40.339	21.494	1.00	55.19	B1	ATOM 1874 CA CYS 275	35.026	39.188	28.611	1.00	59.30	B2
ATOM 1832 CB SER 263	26.871	40.511	20.612	1.00	57.17	B1	ATOM 1875 C CYS 275	35.875	38.063	28.054	1.00	55.89	B2
ATOM 1833 OG SER 263	26.498	39.411	19.776	1.00	64.12	B1	ATOM 1876 O CYS 275	35.425	37.152	27.351	1.00	54.41	B2
ATOM 1834 HG SER 263	26.093	38.741	20.336	1.00	0.00	B1	ATOM 1877 CB CYS 275	35.349	40.466	27.827	1.00	61.50	B2
ATOM 1835 C SER 263	27.909	41.354	22.600	1.00	56.15	B1	ATOM 1878 SG CYS 275	34.119	40.937	26.577	1.00	66.63	B2
ATOM 1836 O SER 263	28.744	42.243	22.753	1.00	57.88	B1	ATOM 1879 N LEU 276	37.124	38.114	28.506	1.00	52.23	B2
ATOM 1837 N SER 264	26.899	41.231	23.452	1.00	56.52	B1	ATOM 1880 H LEU 276	37.350	38.722	29.233	1.00	0.00	B2
ATOM 1838 H SER 264	26.277	40.478	23.415	1.00	0.00	B1	ATOM 1881 CA LEU 276	38.091	37.163	28.066	1.00	48.93	B2
ATOM 1839 CA SER 264	26.716	42.204	24.494	1.00	58.28	B1	ATOM 1882 CB LEU 276	39.483	37.564	28.542	1.00	45.96	B2
ATOM 1840 CB SER 264	25.313	41.977	25.064	1.00	58.77	B1	ATOM 1883 CG LEU 276	40.241	38.557	27.670	1.00	43.20	B2
ATOM 1841 OG SER 264	25.099	40.726	25.713	1.00	58.50	B1	ATOM 1884 CD1 LEU 276	41.599	38.782	28.279	1.00	44.63	B2
ATOM 1842 HG SER 264	25.385	40.832	26.632	1.00	0.00	B1	ATOM 1885 CD2 LEU 276	40.429	38.033	26.271	1.00	40.55	B2
ATOM 1843 C SER 264	27.800	42.168	25.584	1.00	59.95	B1	ATOM 1886 C LEU 276	37.673	35.833	28.638	1.00	47.84	B2
ATOM 1844 O SER 264	27.610	42.805	26.620	1.00	60.44	B1	ATOM 1887 O LEU 276	37.784	34.803	27.964	1.00	48.51	B2
ATOM 1845 N CYS 265	28.948	41.484	25.466	1.00	61.37	B1	ATOM 1888 N ALA 277	37.074	35.840	29.804	1.00	45.56	B2
ATOM 1846 H CYS 265	29.192	41.114	24.596	1.00	0.00	B1	ATOM 1889 H ALA 277	36.898	36.662	30.289	1.00	0.00	B2
ATOM 1847 CA CYS 265	29.958	41.502	26.509	1.00	62.57	B1	ATOM 1890 CA ALA 277	36.613	34.605	30.365	1.00	45.77	B2
ATOM 1848 CB CYS 265	30.991	40.418	26.285	1.00	64.32	B1	ATOM 1891 CB ALA 277	36.147	34.810	31.783	1.00	47.87	B2

FIG. 5W

ATOM 1892 C	ALA	277	35.442	34.111	29.542	1.00	45.03	B2	ATOM 1935 O	SER	281	33.334	27.973	26.496	1.00	44.83	B2
ATOM 1893 O	ALA	277	35.342	32.926	29.271	1.00	44.20	B2	ATOM 1936 N	GLY	282	32.977	30.120	25.940	1.00	42.33	B2
ATOM 1894 N	GLN	278	34.592	35.000	29.049	1.00	45.13	B2	ATOM 1937 H	GLY	282	33.043	31.058	26.221	1.00	0.00	B2
ATOM 1895 H	GLN	278	34.731	35.944	29.263	1.00	0.00	B2	ATOM 1938 CA	GLY	282	32.363	29.869	24.632	1.00	40.65	B2
ATOM 1896 CA	GLN	278	33.435	34.601	28.284	1.00	45.27	B2	ATOM 1939 C	GLY	282	33.175	28.937	23.755	1.00	39.06	B2
ATOM 1897 CB	GLN	278	32.550	35.825	28.083	1.00	48.13	B2	ATOM 1940 O	GLY	282	32.584	28.075	23.107	1.00	40.10	B2
ATOM 1898 CG	GLN	278	31.140	35.442	28.484	1.00	56.00	B2	ATOM 1941 N	LEU	283	34.514	29.066	23.776	1.00	37.39	B2
ATOM 1899 CD	GLN	278	30.045	36.464	28.178	1.00	61.94	B2	ATOM 1942 H	LEU	283	34.880	29.807	24.304	1.00	0.00	B2
ATOM 1900 OE1	GLN	278	29.048	36.530	28.896	1.00	65.95	B2	ATOM 1943 CA	LEU	283	35.465	28.213	23.037	1.00	35.06	B2
ATOM 1901 NE2	GLN	278	30.080	37.291	27.132	1.00	65.55	B2	ATOM 1944 CB	LEU	283	36.902	28.718	23.089	1.00	30.20	B2
ATOM 1902 HE21	GLN	278	30.829	37.221	26.510	1.00	0.00	B2	ATOM 1945 CG	LEU	283	37.167	30.001	22.302	1.00	25.73	B2
ATOM 1903 HE22	GLN	278	29.343	37.927	27.056	1.00	0.00	B2	ATOM 1946 CD1	LEU	283	38.539	30.461	22.664	1.00	24.38	B2
ATOM 1904 C	GLN	278	33.812	33.971	26.950	1.00	43.16	B2	ATOM 1947 CD2	LEU	283	37.036	29.802	20.815	1.00	21.94	B2
ATOM 1905 O	GLN	278	33.173	33.050	26.462	1.00	40.58	B2	ATOM 1948 C	LEU	283	35.470	26.851	23.651	1.00	34.81	B2
ATOM 1906 N	LEU	279	34.869	34.476	26.331	1.00	43.32	B2	ATOM 1949 O	LEU	283	35.314	25.859	22.947	1.00	31.09	B2
ATOM 1907 H	LEU	279	35.328	35.227	26.767	1.00	0.00	B2	ATOM 1950 N	PHE	284	35.533	26.842	24.973	1.00	37.62	B2
ATOM 1908 CA	LEU	279	35.398	33.966	25.069	1.00	42.80	B2	ATOM 1951 H	PHE	284	35.567	27.686	25.467	1.00	0.00	B2
ATOM 1909 CB	LEU	279	36.583	34.790	24.626	1.00	41.42	B2	ATOM 1952 CA	PHE	284	35.485	25.596	25.710	1.00	42.51	B2
ATOM 1910 CG	LEU	279	36.885	35.014	23.190	1.00	40.76	B2	ATOM 1953 CB	PHE	284	35.542	25.877	27.184	1.00	49.49	B2
ATOM 1911 CD1	LEU	279	38.239	35.647	23.130	1.00	41.76	B2	ATOM 1954 CG	PHE	284	36.221	24.770	27.968	1.00	58.39	B2
ATOM 1912 CD2	LEU	279	36.943	33.753	22.411	1.00	40.01	B2	ATOM 1955 CD1	PHE	284	37.265	25.108	28.816	1.00	63.05	B2
ATOM 1913 C	LEU	279	35.876	32.554	25.341	1.00	42.92	B2	ATOM 1956 CD2	PHE	284	35.810	23.453	27.861	1.00	60.84	B2
ATOM 1914 O	LEU	279	35.572	31.598	24.640	1.00	42.57	B2	ATOM 1957 CE1	PHE	284	37.900	24.124	29.563	1.00	65.86	B2
ATOM 1915 N	HIS	280	36.654	32.463	26.403	1.00	43.93	B2	ATOM 1958 CE2	PHE	284	36.444	22.480	28.605	1.00	64.49	B2
ATOM 1916 H	HIS	280	36.837	33.282	26.917	1.00	0.00	B2	ATOM 1959 CZ	PHE	284	37.486	22.810	29.455	1.00	66.32	B2
ATOM 1917 CA	HIS	280	37.215	31.223	26.850	1.00	46.12	B2	ATOM 1960 C	PHE	284	34.204	24.849	25.384	1.00	41.44	B2
ATOM 1918 CB	HIS	280	38.029	31.506	28.101	1.00	48.74	B2	ATOM 1961 O	PHE	284	34.257	23.630	25.306	1.00	41.42	B2
ATOM 1919 CG	HIS	280	38.914	30.320	28.394	1.00	54.16	B2	ATOM 1962 N	LEU	285	33.100	25.563	25.101	1.00	41.24	B2
ATOM 1920 CD1	HIS	280	40.041	30.069	27.650	1.00	56.02	B2	ATOM 1963 H	LEU	285	33.192	26.534	25.174	1.00	0.00	B2
ATOM 1921 ND1	HIS	280	38.759	29.326	29.264	1.00	56.01	B2	ATOM 1964 CA	LEU	285	31.781	25.025	24.730	1.00	38.92	B2
ATOM 1922 HD1	HIS	280	38.012	29.203	29.890	1.00	0.00	B2	ATOM 1965 CB	LEU	285	30.727	26.139	24.807	1.00	39.05	B2
ATOM 1923 CE1	HIS	280	39.744	28.483	29.058	1.00	56.64	B2	ATOM 1966 CG	LEU	285	29.292	25.740	24.481	1.00	41.16	B2
ATOM 1924 NE2	HIS	280	40.507	28.937	28.088	1.00	56.64	B2	ATOM 1967 CD1	LEU	285	28.711	24.981	25.662	1.00	41.12	B2
ATOM 1925 HE2	HIS	280	41.282	28.478	27.684	1.00	0.00	B2	ATOM 1968 CD2	LEU	285	28.472	26.971	24.139	1.00	39.60	B2
ATOM 1926 C	HIS	280	36.161	30.134	27.117	1.00	45.65	B2	ATOM 1969 C	LEU	285	31.780	24.441	23.329	1.00	37.34	B2
ATOM 1927 O	HIS	280	36.362	28.977	26.711	1.00	46.23	B2	ATOM 1970 O	LEU	285	31.245	23.351	23.095	1.00	36.97	B2
ATOM 1928 N	SER	281	35.086	30.473	27.822	1.00	43.91	B2	ATOM 1971 N	TYR	286	32.352	25.172	22.372	1.00	35.26	B2
ATOM 1929 H	SER	281	35.009	31.367	28.219	1.00	0.00	B2	ATOM 1972 H	TYR	286	32.705	26.062	22.593	1.00	0.00	B2
ATOM 1930 CA	SER	281	34.008	29.574	28.105	1.00	43.53	B2	ATOM 1973 CA	TYR	286	32.455	24.660	21.033	1.00	35.04	B2
ATOM 1931 CB	SER	281	33.026	30.291	29.002	1.00	44.18	B2	ATOM 1974 CB	TYR	286	32.891	25.790	20.122	1.00	34.44	B2
ATOM 1932 CG	SER	281	33.761	30.812	30.113	1.00	47.79	B2	ATOM 1975 CG	TYR	286	31.690	26.684	19.808	1.00	34.75	B2
ATOM 1933 HG	SER	281	33.288	30.648	30.931	1.00	0.00	B2	ATOM 1976 CD1	TYR	286	31.433	27.879	20.469	1.00	35.67	B2
ATOM 1934 C	SER	281	33.382	29.169	26.787	1.00	43.35	B2	ATOM 1977 CE1	TYR	286	30.313	28.620	20.158	1.00	36.90	B2

FIG. 5X

ATOM 1978	CD2 TYR 286	30.823	26.255	18.839	1.00	36.19	B2	ATOM 2021	NE2 GLN 291	35.494	16.535	24.072	1.00	42.59	B2
ATOM 1979	CE2 TYR 286	29.707	26.990	18.521	1.00	37.55	B2	ATOM 2022	HE21 GLN 291	34.928	17.287	23.817	1.00	0.00	B2
ATOM 1980	CZ TYR 286	29.449	28.164	19.178	1.00	37.73	B2	ATOM 2023	HE22 GLN 291	35.910	16.463	24.958	1.00	0.00	B2
ATOM 1981	OH TYR 286	28.285	28.826	18.823	1.00	38.04	B2	ATOM 2024	C GLN 291	32.233	15.536	20.307	1.00	36.66	B2
ATOM 1982	HH TYR 286	28.289	29.707	19.243	1.00	0.00	B2	ATOM 2025	O GLN 291	32.220	14.478	19.707	1.00	37.46	B2
ATOM 1983	C TYR 286	33.393	23.464	20.926	1.00	34.80	B2	ATOM 2026	N ALA 292	31.143	16.023	20.913	1.00	38.37	B2
ATOM 1984	O TYR 286	33.071	22.537	20.180	1.00	35.35	B2	ATOM 2027	H ALA 292	31.255	16.849	21.418	1.00	0.00	B2
ATOM 1985	N ALA 287	34.527	23.339	21.636	1.00	34.66	B2	ATOM 2028	CA ALA 292	29.778	15.451	20.857	1.00	39.25	B2
ATOM 1986	H ALA 287	34.803	24.088	22.206	1.00	0.00	B2	ATOM 2029	CB ALA 292	28.818	16.485	21.444	1.00	40.28	B2
ATOM 1987	CA ALA 287	35.350	22.108	21.565	1.00	34.28	B2	ATOM 2030	C ALA 292	29.215	14.999	19.484	1.00	38.65	B2
ATOM 1988	CB ALA 287	36.617	22.291	22.415	1.00	33.63	B2	ATOM 2031	O ALA 292	28.411	14.067	19.356	1.00	37.58	B2
ATOM 1989	C ALA 287	34.528	20.906	22.073	1.00	33.32	B2	ATOM 2032	N LEU 293	29.614	15.702	18.430	1.00	39.00	B2
ATOM 1990	O ALA 287	34.535	19.827	21.478	1.00	33.07	B2	ATOM 2033	H LEU 293	30.149	16.513	18.574	1.00	0.00	B2
ATOM 1991	N GLY 288	33.723	21.118	23.111	1.00	33.19	B2	ATOM 2034	CA LEU 293	29.265	15.335	17.077	1.00	39.74	B2
ATOM 1992	H GLY 288	33.791	21.985	23.564	1.00	0.00	B2	ATOM 2035	CB LEU 293	29.662	16.418	16.106	1.00	37.53	B2
ATOM 1993	CA GLY 288	32.761	20.162	23.655	1.00	35.62	B2	ATOM 2036	CG LEU 293	28.969	17.701	16.138	1.00	34.34	B2
ATOM 1994	C GLY 288	31.744	19.606	22.636	1.00	36.89	B2	ATOM 2037	CD1 LEU 293	29.547	18.582	15.053	1.00	33.88	B2
ATOM 1995	O GLY 288	31.624	18.379	22.444	1.00	34.97	B2	ATOM 2038	CD2 LEU 293	27.503	17.462	15.918	1.00	35.69	B2
ATOM 1996	N LEU 289	31.037	20.536	21.966	1.00	36.69	B2	ATOM 2039	C LEU 293	29.933	14.060	16.596	1.00	40.86	B2
ATOM 1997	H LEU 289	31.200	21.476	22.201	1.00	0.00	B2	ATOM 2040	O LEU 293	29.686	13.669	15.449	1.00	40.58	B2
ATOM 1998	CA LEU 289	30.018	20.249	20.954	1.00	35.05	B2	ATOM 2041	N GLU 294	30.887	13.495	17.365	1.00	42.12	B2
ATOM 1999	CB LEU 289	29.351	21.576	20.502	1.00	36.32	B2	ATOM 2042	H GLU 294	31.131	13.963	18.190	1.00	0.00	B2
ATOM 2000	CG LEU 289	28.552	22.450	21.464	1.00	35.76	B2	ATOM 2043	CA GLU 294	31.598	12.253	17.076	1.00	42.89	B2
ATOM 2001	CD1 LEU 289	28.256	23.821	20.890	1.00	32.66	B2	ATOM 2044	CB GLU 294	30.806	10.984	17.485	1.00	48.38	B2
ATOM 2002	CD2 LEU 289	27.246	21.780	21.697	1.00	35.35	B2	ATOM 2045	CG GLU 294	30.715	10.614	18.972	1.00	56.26	B2
ATOM 2003	C LEU 289	30.536	19.519	19.714	1.00	34.21	B2	ATOM 2046	CD GLU 294	29.271	10.408	19.486	1.00	63.70	B2
ATOM 2004	O LEU 289	29.871	18.694	19.078	1.00	33.28	B2	ATOM 2047	OE1 GLU 294	29.058	10.603	20.702	1.00	67.72	B2
ATOM 2005	N LEU 290	31.756	19.902	19.355	1.00	33.25	B2	ATOM 2048	OE2 GLU 294	28.363	10.074	18.692	1.00	64.81	B2
ATOM 2006	H LEU 290	32.183	20.634	19.850	1.00	0.00	B2	ATOM 2049	C GLU 294	31.972	12.068	15.632	1.00	41.53	B2
ATOM 2007	CA LEU 290	32.448	19.345	18.230	1.00	32.44	B2	ATOM 2050	O GLU 294	31.804	11.007	15.021	1.00	40.29	B2
ATOM 2008	CB LEU 290	33.729	20.159	18.000	1.00	32.62	B2	ATOM 2051	N GLY 295	32.424	13.203	15.106	1.00	40.93	B2
ATOM 2009	CG LEU 290	33.560	21.509	17.315	1.00	32.05	B2	ATOM 2052	H GLY 295	32.357	14.033	15.621	1.00	0.00	B2
ATOM 2010	CD1 LEU 290	34.889	22.189	17.349	1.00	32.58	B2	ATOM 2053	CA GLY 295	32.998	13.236	13.783	1.00	39.95	B2
ATOM 2011	CD2 LEU 290	33.068	21.374	15.879	1.00	31.74	B2	ATOM 2054	C GLY 295	32.027	13.230	12.634	1.00	40.60	B2
ATOM 2012	C LEU 290	32.737	17.908	18.558	1.00	31.94	B2	ATOM 2055	O GLY 295	32.477	13.216	11.487	1.00	40.96	B2
ATOM 2013	O LEU 290	32.432	17.020	17.772	1.00	30.50	B2	ATOM 2056	N ILE 296	30.728	13.296	12.898	1.00	41.18	B2
ATOM 2014	N GLN 291	33.249	17.711	19.770	1.00	33.58	B2	ATOM 2057	H ILE 296	30.446	13.210	13.825	1.00	0.00	B2
ATOM 2015	H GLN 291	33.512	18.494	20.298	1.00	0.00	B2	ATOM 2058	CA ILE 296	29.687	13.306	11.888	1.00	44.02	B2
ATOM 2016	CA GLN 291	33.499	16.372	20.311	1.00	36.39	B2	ATOM 2059	CB ILE 296	29.683	14.580	11.009	1.00	43.49	B2
ATOM 2017	CB GLN 291	33.988	16.490	21.702	1.00	36.86	B2	ATOM 2060	CG ILE 296	28.288	14.685	10.421	1.00	40.56	B2
ATOM 2018	CG GLN 291	34.926	15.367	21.950	1.00	39.48	B2	ATOM 2061	CG1 ILE 296	30.047	15.831	11.793	1.00	45.11	B2
ATOM 2019	CD GLN 291	35.658	15.503	23.252	1.00	40.79	B2	ATOM 2062	CD ILE 296	30.039	17.189	11.062	1.00	46.06	B2
ATOM 2020	OE1 GLN 291	36.457	14.626	23.549	1.00	44.80	B2	ATOM 2063	C ILE 296	29.820	12.107	10.949	1.00	46.71	B2

FIG. 5Y

ATOM 2064	O	ILE	296	28.918	11.279	11.060	1.00	50.61	B2	ATOM 2107	CD	PRO	302	38.353	12.630	8.790	1.00	37.77	B2
ATOM 2065	N	SER	297	30.767	11.875	10.019	1.00	47.21	B2	ATOM 2108	CA	PRO	302	39.676	14.281	9.884	1.00	37.60	B2
ATOM 2066	H	SER	297	31.526	12.491	9.936	1.00	0.00	B2	ATOM 2109	CB	PRO	302	40.256	13.907	8.541	1.00	36.62	B2
ATOM 2067	CA	SER	297	30.810	10.646	9.234	1.00	46.73	B2	ATOM 2110	CG	PRO	302	39.047	13.487	7.745	1.00	37.94	B2
ATOM 2068	CB	SER	297	30.239	10.884	7.865	1.00	45.48	B2	ATOM 2111	C	PRO	302	39.486	15.782	10.033	1.00	37.45	B2
ATOM 2069	OG	SER	297	30.988	11.782	7.072	1.00	46.27	B2	ATOM 2112	O	PRO	302	40.132	16.398	10.901	1.00	38.33	B2
ATOM 2070	HG	SER	297	30.321	12.200	6.503	1.00	0.00	B2	ATOM 2113	N	THR	303	38.547	16.311	9.204	1.00	37.05	B2
ATOM 2071	C	SER	297	32.263	10.269	9.123	1.00	48.72	B2	ATOM 2114	H	THR	303	38.085	15.727	8.567	1.00	0.00	B2
ATOM 2072	O	SER	297	33.120	11.122	9.391	1.00	50.55	B2	ATOM 2115	CA	THR	303	38.119	17.705	9.128	1.00	35.81	B2
ATOM 2073	N	PRO	298	32.655	9.069	8.697	1.00	49.68	B2	ATOM 2116	CB	THR	303	36.963	17.770	8.123	1.00	37.26	B2
ATOM 2074	CD	PRO	298	31.782	7.964	8.334	1.00	50.62	B2	ATOM 2117	OGI	THR	303	37.416	17.161	6.909	1.00	39.64	B2
ATOM 2075	CA	PRO	298	34.049	8.701	8.458	1.00	50.33	B2	ATOM 2118	HGI	THR	303	37.369	17.785	6.178	1.00	0.00	B2
ATOM 2076	CB	PRO	298	33.948	7.308	7.856	1.00	51.53	B2	ATOM 2119	CG2	THR	303	36.469	19.204	7.927	1.00	38.55	B2
ATOM 2077	CG	PRO	298	32.576	7.266	7.231	1.00	50.43	B2	ATOM 2120	C	THR	303	37.687	18.223	10.506	1.00	34.93	B2
ATOM 2078	C	PRO	298	34.795	9.692	7.579	1.00	50.08	B2	ATOM 2121	O	THR	303	38.085	19.263	11.063	1.00	35.11	B2
ATOM 2079	O	PRO	298	35.883	10.137	7.930	1.00	50.50	B2	ATOM 2122	N	LEU	304	36.928	17.366	11.150	1.00	33.76	B2
ATOM 2080	N	GLN	299	34.173	10.086	6.469	1.00	50.48	B2	ATOM 2123	H	LEU	304	36.672	16.500	10.762	1.00	0.00	B2
ATOM 2081	H	GLN	299	33.279	9.729	6.296	1.00	0.00	B2	ATOM 2124	CA	LEU	304	36.436	17.746	12.418	1.00	31.01	B2
ATOM 2082	CA	GLN	299	34.749	11.050	5.550	1.00	51.74	B2	ATOM 2125	CB	LEU	304	35.345	16.803	12.708	1.00	30.31	B2
ATOM 2083	CB	GLN	299	33.898	11.236	4.301	1.00	54.33	B2	ATOM 2126	CG	LEU	304	34.234	17.567	13.320	1.00	31.32	B2
ATOM 2084	CG	GLN	299	33.095	10.067	3.725	1.00	58.11	B2	ATOM 2127	CD1	LEU	304	33.121	17.626	12.309	1.00	28.87	B2
ATOM 2085	CD	GLN	299	31.658	10.086	4.259	1.00	61.49	B2	ATOM 2128	CD2	LEU	304	33.921	16.970	14.692	1.00	34.23	B2
ATOM 2086	OEI	GLN	299	31.160	9.083	4.776	1.00	61.00	B2	ATOM 2129	C	LEU	304	37.553	17.726	13.421	1.00	31.86	B2
ATOM 2087	NEI	GLN	299	30.942	11.217	4.204	1.00	62.12	B2	ATOM 2130	O	LEU	304	37.615	18.623	14.259	1.00	34.21	B2
ATOM 2088	HEI	GLN	299	31.345	12.012	3.800	1.00	0.00	B2	ATOM 2131	N	ASP	305	38.510	16.811	13.326	1.00	30.56	B2
ATOM 2089	HE2	GLN	299	30.034	11.191	4.566	1.00	0.00	B2	ATOM 2132	H	ASP	305	38.456	16.117	12.635	1.00	0.00	B2
ATOM 2090	C	GLN	299	34.923	12.453	6.160	1.00	51.04	B2	ATOM 2133	CA	ASP	305	39.576	16.797	14.303	1.00	30.72	B2
ATOM 2091	O	GLN	299	35.796	13.186	5.718	1.00	53.38	B2	ATOM 2134	CB	ASP	305	40.504	15.608	14.114	1.00	36.20	B2
ATOM 2092	N	LEU	300	34.118	12.918	7.120	1.00	48.15	B2	ATOM 2135	CG	ASP	305	39.912	14.201	14.288	1.00	40.64	B2
ATOM 2093	H	LEU	300	33.383	12.351	7.437	1.00	0.00	B2	ATOM 2136	OD1	ASP	305	38.976	14.040	15.103	1.00	37.52	B2
ATOM 2094	CA	LEU	300	34.272	14.220	7.745	1.00	43.32	B2	ATOM 2137	OD2	ASP	305	40.426	13.304	13.581	1.00	42.39	B2
ATOM 2095	CB	LEU	300	32.856	14.719	8.021	1.00	41.39	B2	ATOM 2138	C	ASP	305	40.435	18.034	14.238	1.00	27.56	B2
ATOM 2096	CG	LEU	300	32.073	15.546	6.974	1.00	37.99	B2	ATOM 2139	O	ASP	305	40.775	18.575	15.311	1.00	24.61	B2
ATOM 2097	CD1	LEU	300	31.872	14.824	5.688	1.00	38.34	B2	ATOM 2140	N	THR	306	40.781	18.417	12.979	1.00	24.77	B2
ATOM 2098	CD2	LEU	300	30.705	15.809	7.522	1.00	37.67	B2	ATOM 2141	H	THR	306	40.469	17.875	12.230	1.00	0.00	B2
ATOM 2099	C	LEU	300	35.142	14.220	9.019	1.00	42.84	B2	ATOM 2142	CA	THR	306	41.553	19.633	12.751	1.00	24.39	B2
ATOM 2100	O	LEU	300	35.558	15.278	9.541	1.00	41.56	B2	ATOM 2143	CB	THR	306	41.665	19.931	11.318	1.00	24.58	B2
ATOM 2101	N	GLY	301	35.467	13.016	9.528	1.00	40.83	B2	ATOM 2144	OG1	THR	306	42.074	18.753	10.665	1.00	25.13	B2
ATOM 2102	H	GLY	301	35.157	12.221	9.046	1.00	0.00	B2	ATOM 2145	HG1	THR	306	41.447	18.029	10.768	1.00	0.00	B2
ATOM 2103	CA	GLY	301	36.199	12.826	10.779	1.00	38.72	B2	ATOM 2146	CG2	THR	306	42.690	21.027	11.089	1.00	25.77	B2
ATOM 2104	C	GLY	301	37.500	13.607	10.887	1.00	37.69	B2	ATOM 2147	C	THR	306	40.893	20.844	13.419	1.00	25.24	B2
ATOM 2105	O	GLY	301	37.665	14.406	11.809	1.00	37.31	B2	ATOM 2148	O	THR	306	41.488	21.472	14.296	1.00	27.24	B2
ATOM 2106	N	PRO	302	38.468	13.452	9.985	1.00	37.33	B2	ATOM 2149	N	LEU	307	39.615	21.134	13.139	1.00	25.91	B2

FIG. 5Z

ATOM 2150 H LEU 307	39.125	20.547	12.520	1.00	0.00	B2	ATOM 2193 CG2 VAL 311	37.261	25.488	17.667	1.00	18.56	B2
ATOM 2151 CA LEU 307	38.900	22.228	13.764	1.00	25.53	B2	ATOM 2194 C VAL 311	40.270	25.638	20.020	1.00	27.21	B2
ATOM 2152 CB LEU 307	37.571	22.170	13.142	1.00	25.09	B2	ATOM 2195 O VAL 311	40.437	26.647	20.719	1.00	29.71	B2
ATOM 2153 CG LEU 307	36.530	23.097	13.588	1.00	27.93	B2	ATOM 2196 N ALA 312	40.762	24.428	20.357	1.00	27.97	B2
ATOM 2154 CD1 LEU 307	37.008	24.515	13.484	1.00	29.87	B2	ATOM 2197 H ALA 312	40.585	23.674	19.756	1.00	0.00	B2
ATOM 2155 CD2 LEU 307	35.311	22.846	12.728	1.00	28.93	B2	ATOM 2198 CA ALA 312	41.515	24.157	21.583	1.00	29.24	B2
ATOM 2156 C LEU 307	38.850	22.214	15.269	1.00	27.09	B2	ATOM 2199 CB ALA 312	41.855	22.688	21.532	1.00	30.53	B2
ATOM 2157 O LEU 307	38.854	23.253	15.925	1.00	30.03	B2	ATOM 2200 C ALA 312	42.778	25.026	21.784	1.00	30.06	B2
ATOM 2158 N GLN 308	38.875	21.044	15.879	1.00	29.09	B2	ATOM 2201 O ALA 312	43.057	25.508	22.886	1.00	30.04	B2
ATOM 2159 H GLN 308	38.883	20.239	15.319	1.00	0.00	B2	ATOM 2202 N ASP 313	43.554	25.286	20.735	1.00	31.33	B2
ATOM 2160 CA GLN 308	38.824	20.848	17.340	1.00	29.36	B2	ATOM 2203 H ASP 313	43.433	24.730	19.935	1.00	0.00	B2
ATOM 2161 CB GLN 308	38.379	19.399	17.562	1.00	29.41	B2	ATOM 2204 CA ASP 313	44.610	26.275	20.743	1.00	34.22	B2
ATOM 2162 CG GLN 308	37.862	19.140	18.935	1.00	32.24	B2	ATOM 2205 CB ASP 313	45.279	26.512	19.447	1.00	38.87	B2
ATOM 2163 CD GLN 308	37.586	17.672	19.165	1.00	34.03	B2	ATOM 2206 CG ASP 313	46.071	25.404	18.866	1.00	44.55	B2
ATOM 2164 OE1 GLN 308	36.973	17.023	18.311	1.00	33.48	B2	ATOM 2207 OD1 ASP 313	46.225	25.439	17.636	1.00	48.67	B2
ATOM 2165 NE2 GLN 308	38.053	17.127	20.299	1.00	31.67	B2	ATOM 2208 OD2 ASP 313	46.521	24.553	19.647	1.00	49.25	B2
ATOM 2166 HE21 GLN 308	38.547	17.697	20.917	1.00	0.00	B2	ATOM 2209 C ASP 313	44.187	27.699	21.059	1.00	35.12	B2
ATOM 2167 HE22 GLN 308	37.875	16.174	20.436	1.00	0.00	B2	ATOM 2210 O ASP 313	44.807	28.390	21.894	1.00	38.60	B2
ATOM 2168 C GLN 308	40.154	21.138	18.051	1.00	28.94	B2	ATOM 2211 N PHE 314	43.192	28.216	20.339	1.00	33.36	B2
ATOM 2169 O GLN 308	40.196	21.796	19.101	1.00	28.44	B2	ATOM 2212 H PHE 314	42.784	27.683	19.619	1.00	0.00	B2
ATOM 2170 N LEU 309	41.269	20.671	17.460	1.00	28.78	B2	ATOM 2213 CA PHE 314	42.715	29.548	20.600	1.00	31.09	B2
ATOM 2171 H LEU 309	41.157	20.120	16.655	1.00	0.00	B2	ATOM 2214 CB PHE 314	41.572	29.860	19.631	1.00	32.06	B2
ATOM 2172 CA LEU 309	42.632	20.923	17.967	1.00	28.56	B2	ATOM 2215 CG PHE 314	41.074	31.303	19.636	1.00	33.37	B2
ATOM 2173 CB LEU 309	43.671	20.154	17.106	1.00	26.54	B2	ATOM 2216 CD1 PHE 314	39.780	31.568	19.247	1.00	31.81	B2
ATOM 2174 CG LEU 309	43.632	18.636	17.241	1.00	24.98	B2	ATOM 2217 CD2 PHE 314	41.907	32.354	20.021	1.00	35.65	B2
ATOM 2175 CD1 LEU 309	44.595	17.935	16.353	1.00	24.17	B2	ATOM 2218 CE1 PHE 314	39.318	32.857	19.240	1.00	29.15	B2
ATOM 2176 CD2 LEU 309	43.992	18.310	18.621	1.00	23.45	B2	ATOM 2219 CE2 PHE 314	41.455	33.648	20.017	1.00	32.48	B2
ATOM 2177 C LEU 309	42.893	22.416	17.909	1.00	28.24	B2	ATOM 2220 CZ PHE 314	40.154	33.870	19.622	1.00	32.81	B2
ATOM 2178 O LEU 309	43.370	22.957	18.907	1.00	30.32	B2	ATOM 2221 C PHE 314	42.282	29.601	22.057	1.00	29.90	B2
ATOM 2179 N ASP 310	42.548	23.027	16.749	1.00	26.58	B2	ATOM 2222 O PHE 314	42.658	30.550	22.764	1.00	26.87	B2
ATOM 2180 H ASP 310	42.296	22.437	16.007	1.00	0.00	B2	ATOM 2223 N ALA 315	41.686	28.532	22.584	1.00	29.29	B2
ATOM 2181 CA ASP 310	42.495	24.477	16.495	1.00	27.90	B2	ATOM 2224 H ALA 315	41.448	27.764	22.022	1.00	0.00	B2
ATOM 2182 CB ASP 310	42.025	24.659	15.076	1.00	28.41	B2	ATOM 2225 CA ALA 315	41.300	28.583	23.961	1.00	31.61	B2
ATOM 2183 CG ASP 310	43.162	24.556	14.096	1.00	31.84	B2	ATOM 2226 CB ALA 315	40.632	27.358	24.451	1.00	32.23	B2
ATOM 2184 OD1 ASP 310	42.959	24.766	12.905	1.00	31.54	B2	ATOM 2227 C ALA 315	42.482	28.751	24.836	1.00	34.41	B2
ATOM 2185 OD2 ASP 310	44.297	24.314	14.514	1.00	37.32	B2	ATOM 2228 O ALA 315	42.361	29.437	25.853	1.00	37.66	B2
ATOM 2186 C ASP 310	41.666	25.410	17.422	1.00	27.99	B2	ATOM 2229 N THR 316	43.646	28.250	24.476	1.00	36.16	B2
ATOM 2187 O ASP 310	42.219	26.429	17.876	1.00	27.23	B2	ATOM 2230 H THR 316	43.745	27.778	23.625	1.00	0.00	B2
ATOM 2188 N VAL 311	40.374	25.086	17.725	1.00	26.29	B2	ATOM 2231 CA THR 316	44.780	28.388	25.374	1.00	37.99	B2
ATOM 2189 H VAL 311	39.961	24.347	17.225	1.00	0.00	B2	ATOM 2232 CB THR 316	45.795	27.255	25.156	1.00	41.16	B2
ATOM 2190 CA VAL 311	39.546	25.803	18.706	1.00	24.29	B2	ATOM 2233 OG1 THR 316	45.049	26.081	25.521	1.00	45.50	B2
ATOM 2191 CB VAL 311	38.098	25.217	18.869	1.00	21.47	B2	ATOM 2234 HG1 THR 316	44.316	25.900	24.913	1.00	0.00	B2
ATOM 2192 CG1 VAL 311	37.341	25.915	19.949	1.00	19.01	B2	ATOM 2235 CG2 THR 316	47.152	27.415	25.888	1.00	40.31	B2

FIG. 5AA

ATOM 2236	C THR 316	45.458	29.710	25.177	1.00	38.47	B2	ATOM 2279	NE2 GLN 320	49.771	30.145	25.131	1.00	59.32	B2
ATOM 2237	O THR 316	45.903	30.189	26.217	1.00	39.63	B2	ATOM 2280	HE21 GLN 320	48.859	30.087	24.789	1.00	0.00	B2
ATOM 2238	N THR 317	45.620	30.287	23.970	1.00	36.53	B2	ATOM 2281	HE22 GLN 320	50.582	30.083	24.590	1.00	0.00	B2
ATOM 2239	H THR 317	45.351	29.800	23.164	1.00	0.00	B2	ATOM 2282	C GLN 320	47.717	33.790	28.983	1.00	49.62	B2
ATOM 2240	CA THR 317	46.092	31.657	23.844	1.00	37.07	B2	ATOM 2283	O GLN 320	48.251	34.209	29.987	1.00	49.91	B2
ATOM 2241	CB THR 317	45.866	32.098	22.392	1.00	36.01	B2	ATOM 2284	N GLN 321	46.998	34.538	28.150	1.00	51.76	B2
ATOM 2242	OGL THR 317	46.752	31.352	21.575	1.00	35.31	B2	ATOM 2285	H GLN 321	46.535	34.102	27.403	1.00	0.00	B2
ATOM 2243	HG1 THR 317	46.489	30.441	21.389	1.00	0.00	B2	ATOM 2286	CA GLN 321	46.837	35.988	28.278	1.00	52.08	B2
ATOM 2244	CG2 THR 317	46.109	33.566	22.156	1.00	34.30	B2	ATOM 2287	CB GLN 321	46.015	36.571	27.151	1.00	49.72	B2
ATOM 2245	C THR 317	45.338	32.597	24.832	1.00	39.30	B2	ATOM 2288	CG GLN 321	45.873	38.058	27.166	1.00	51.19	B2
ATOM 2246	O THR 317	45.941	33.378	25.583	1.00	40.17	B2	ATOM 2289	CD GLN 321	47.211	38.781	27.201	1.00	53.13	B2
ATOM 2247	N ILE 318	44.003	32.481	24.912	1.00	40.83	B2	ATOM 2290	OE1 GLN 321	48.090	38.622	26.364	1.00	55.36	B2
ATOM 2248	H ILE 318	43.554	31.819	24.342	1.00	0.00	B2	ATOM 2291	NE2 GLN 321	47.468	39.618	28.177	1.00	53.21	B2
ATOM 2249	CA ILE 318	43.172	33.317	25.788	1.00	40.75	B2	ATOM 2292	HE21 GLN 321	46.800	39.713	28.889	1.00	0.00	B2
ATOM 2250	CB ILE 318	41.621	32.979	25.567	1.00	37.17	B2	ATOM 2293	HE22 GLN 321	48.338	40.057	28.168	1.00	0.00	B2
ATOM 2251	CG2 ILE 318	40.742	33.706	26.545	1.00	34.29	B2	ATOM 2294	C GLN 321	46.112	36.315	29.562	1.00	53.30	B2
ATOM 2252	CG1 ILE 318	41.216	33.310	24.160	1.00	31.39	B2	ATOM 2295	O GLN 321	46.293	37.422	30.058	1.00	54.39	B2
ATOM 2253	CD ILE 318	41.626	34.657	23.614	1.00	29.66	B2	ATOM 2296	N MET 322	45.269	35.441	30.117	1.00	54.50	B2
ATOM 2254	C ILE 318	43.624	33.019	27.217	1.00	42.43	B2	ATOM 2297	H MET 322	45.098	34.592	29.662	1.00	0.00	B2
ATOM 2255	O ILE 318	44.064	33.963	27.856	1.00	42.54	B2	ATOM 2298	CA MET 322	44.619	35.748	31.375	1.00	55.42	B2
ATOM 2256	N TRP 319	43.662	31.784	27.744	1.00	44.17	B2	ATOM 2299	CB MET 322	43.595	34.690	31.713	1.00	52.93	B2
ATOM 2257	H TRP 319	43.537	31.008	27.163	1.00	0.00	B2	ATOM 2300	CG MET 322	42.527	34.865	30.658	1.00	51.76	B2
ATOM 2258	CA TRP 319	43.994	31.633	29.142	1.00	46.90	B2	ATOM 2301	SD MET 322	40.861	34.428	31.189	1.00	54.19	B2
ATOM 2259	CB TRP 319	43.892	30.179	29.597	1.00	50.64	B2	ATOM 2302	CE MET 322	40.293	33.192	30.069	1.00	52.53	B2
ATOM 2260	CG TRP 319	43.998	30.094	31.131	1.00	56.05	B2	ATOM 2303	C MET 322	45.700	35.811	32.432	1.00	57.69	B2
ATOM 2261	CD2 TRP 319	43.005	30.397	32.038	1.00	58.61	B2	ATOM 2304	O MET 322	45.781	36.739	33.248	1.00	57.85	B2
ATOM 2262	CE2 TRP 319	43.685	30.281	33.251	1.00	60.50	B2	ATOM 2305	N GLU 323	46.652	34.900	32.319	1.00	60.28	B2
ATOM 2263	CE3 TRP 319	41.668	29.788	31.760	1.00	58.07	B2	ATOM 2306	H GLU 323	46.637	34.296	31.544	1.00	0.00	B2
ATOM 2264	CD1 TRP 319	45.188	29.788	31.760	1.00	58.07	B2	ATOM 2307	CA GLU 323	47.741	34.875	33.273	1.00	62.99	B2
ATOM 2265	NE1 TRP 319	44.968	29.921	33.042	1.00	60.07	B2	ATOM 2308	CB GLU 323	48.558	33.635	32.957	1.00	65.81	B2
ATOM 2266	HE1 TRP 319	45.637	29.765	33.740	1.00	0.00	B2	ATOM 2309	CG GLU 323	47.640	32.423	32.918	1.00	68.36	B2
ATOM 2267	CZ2 TRP 319	43.044	30.512	34.456	1.00	61.00	B2	ATOM 2310	CD GLU 323	48.303	31.125	33.310	1.00	71.21	B2
ATOM 2268	CZ3 TRP 319	41.022	30.967	33.210	1.00	61.58	B2	ATOM 2311	OE1 GLU 323	47.651	30.364	34.044	1.00	71.19	B2
ATOM 2269	CH2 TRP 319	41.704	30.854	34.417	1.00	62.04	B2	ATOM 2312	OE2 GLU 323	49.451	30.900	32.884	1.00	72.43	B2
ATOM 2270	C TRP 319	45.398	32.136	29.456	1.00	47.85	B2	ATOM 2313	C GLU 323	48.648	36.124	33.418	1.00	63.96	B2
ATOM 2271	O TRP 319	45.635	32.772	30.490	1.00	47.99	B2	ATOM 2314	OT1 GLU 323	48.782	36.492	34.584	1.00	64.11	B2
ATOM 2272	N GLN 320	46.339	31.915	28.550	1.00	48.63	B2	ATOM 2315	OT2 GLU 323	49.169	36.725	32.449	1.00	62.96	B2
ATOM 2273	H GLN 320	46.091	31.482	27.708	1.00	0.00	B2	ATOM 2316	CB MET 338	27.559	17.690	25.056	1.00	62.56	B3
ATOM 2274	CA GLN 320	47.706	32.319	28.767	1.00	49.45	B2	ATOM 2317	CG MET 338	28.087	18.862	24.222	1.00	63.85	B3
ATOM 2275	CB GLN 320	48.567	31.988	27.589	1.00	51.44	B2	ATOM 2318	SD MET 338	28.738	20.224	25.219	1.00	66.95	B3
ATOM 2276	CG GLN 320	48.828	30.494	27.444	1.00	55.03	B2	ATOM 2319	CE MET 338	27.328	21.252	25.515	1.00	65.50	B3
ATOM 2277	CD GLN 320	49.958	30.349	26.438	1.00	60.17	B2	ATOM 2320	C MET 338	24.988	17.301	25.122	1.00	57.55	B3
ATOM 2278	OE1 GLN 320	51.116	30.465	26.834	1.00	65.26	B2	ATOM 2321	O MET 338	24.417	16.347	25.667	1.00	56.47	B3

FIG. 5BB

ATOM 2322 HT1 MET 338	26.255	16.010	26.594	1.00	0.00	B3
ATOM 2323 HT2 MET 338	25.375	17.061	27.500	1.00	0.00	B3
ATOM 2324 N MET 338	26.286	16.971	27.009	1.00	61.55	B3
ATOM 2325 HT3 MET 338	27.108	17.107	27.620	1.00	0.00	B3
ATOM 2326 CA MET 338	26.226	17.853	25.851	1.00	60.35	B3
ATOM 2327 N PRO 339	24.493	17.830	23.998	1.00	55.58	B3
ATOM 2328 CD PRO 339	24.914	19.075	23.375	1.00	54.39	B3
ATOM 2329 CA PRO 339	23.453	17.226	23.164	1.00	54.62	B3
ATOM 2330 CB PRO 339	23.463	18.098	21.903	1.00	53.52	B3
ATOM 2331 CG PRO 339	24.845	18.711	21.909	1.00	53.04	B3
ATOM 2332 C PRO 339	23.666	15.748	22.881	1.00	53.61	B3
ATOM 2333 O PRO 339	24.730	15.222	23.169	1.00	53.35	B3
ATOM 2334 N ALA 340	22.704	15.045	22.333	1.00	54.32	B3
ATOM 2335 H ALA 340	21.844	15.460	22.111	1.00	0.00	B3
ATOM 2336 CA ALA 340	22.909	13.651	21.968	1.00	56.04	B3
ATOM 2337 CB ALA 340	21.867	12.713	22.625	1.00	57.60	B3
ATOM 2338 C ALA 340	22.617	13.713	20.495	1.00	55.61	B3
ATOM 2339 O ALA 340	21.426	13.783	20.196	1.00	58.64	B3
ATOM 2340 N PHE 341	23.516	13.734	19.514	1.00	53.34	B3
ATOM 2341 H PHE 341	24.472	13.607	19.685	1.00	0.00	B3
ATOM 2342 CA PHE 341	23.016	13.900	18.158	1.00	49.92	B3
ATOM 2343 CB PHE 341	24.050	14.541	17.244	1.00	48.16	B3
ATOM 2344 CG PHE 341	24.382	15.940	17.658	1.00	45.00	B3
ATOM 2345 CD1 PHE 341	23.510	16.923	17.359	1.00	43.44	B3
ATOM 2346 CD2 PHE 341	25.527	16.175	18.388	1.00	47.03	B3
ATOM 2347 CE1 PHE 341	23.812	18.172	17.831	1.00	49.15	B3
ATOM 2348 CE2 PHE 341	25.827	17.426	18.862	1.00	47.86	B3
ATOM 2349 CZ PHE 341	24.952	18.437	18.580	1.00	48.36	B3
ATOM 2350 C PHE 341	22.684	12.510	17.672	1.00	49.56	B3
ATOM 2351 O PHE 341	23.309	11.938	16.781	1.00	51.46	B3
ATOM 2352 N ALA 342	21.625	11.985	18.245	1.00	47.40	B3
ATOM 2353 H ALA 342	21.026	12.585	18.741	1.00	0.00	B3
ATOM 2354 CA ALA 342	21.167	10.650	17.997	1.00	46.11	B3
ATOM 2355 CB ALA 342	19.874	10.531	18.804	1.00	47.10	B3
ATOM 2356 C ALA 342	20.962	10.149	16.556	1.00	44.37	B3
ATOM 2357 O ALA 342	20.138	9.247	16.418	1.00	45.65	B3
ATOM 2358 N SER 343	21.537	10.573	15.423	1.00	41.37	B3
ATOM 2359 H SER 343	22.191	11.301	15.428	1.00	0.00	B3
ATOM 2360 CA SER 343	21.274	9.923	14.145	1.00	38.80	B3
ATOM 2361 CB SER 343	19.842	10.138	13.656	1.00	38.79	B3
ATOM 2362 OG SER 343	19.205	11.300	14.182	1.00	37.75	B3
ATOM 2363 HG SER 343	18.963	11.059	15.092	1.00	0.00	B3
ATOM 2364 C SER 343	22.172	10.467	13.088	1.00	38.22	B3
ATOM 2365 O SER 343	22.810	11.471	13.382	1.00	38.30	B3
ATOM 2366 N ALA 344	22.206	9.845	11.888	1.00	36.73	B3
ATOM 2367 H ALA 344	21.762	8.978	11.805	1.00	0.00	B3
ATOM 2368 CA ALA 344	22.914	10.384	10.715	1.00	38.09	B3
ATOM 2369 CB ALA 344	22.583	9.640	9.422	1.00	36.78	B3
ATOM 2370 C ALA 344	22.472	11.842	10.496	1.00	37.72	B3
ATOM 2371 O ALA 344	23.271	12.765	10.676	1.00	38.42	B3
ATOM 2372 N PHE 345	21.194	12.042	10.163	1.00	36.10	B3
ATOM 2373 H PHE 345	20.668	11.298	9.811	1.00	0.00	B3
ATOM 2374 CA PHE 345	20.564	13.338	10.195	1.00	34.69	B3
ATOM 2375 CB PHE 345	19.040	13.254	10.128	1.00	33.24	B3
ATOM 2376 CG PHE 345	18.462	14.656	9.918	1.00	31.72	B3
ATOM 2377 CD1 PHE 345	17.715	15.223	10.905	1.00	26.64	B3
ATOM 2378 CD2 PHE 345	18.767	15.343	8.745	1.00	29.99	B3
ATOM 2379 CE1 PHE 345	17.284	16.503	10.682	1.00	33.56	B3
ATOM 2380 CE2 PHE 345	18.333	16.619	8.537	1.00	30.81	B3
ATOM 2381 CZ PHE 345	17.581	17.201	9.520	1.00	31.44	B3
ATOM 2382 C PHE 345	20.888	14.145	11.458	1.00	35.02	B3
ATOM 2383 O PHE 345	21.246	15.319	11.292	1.00	37.81	B3
ATOM 2384 N GLN 346	20.814	13.688	12.691	1.00	32.53	B3
ATOM 2385 H GLN 346	20.516	12.778	12.894	1.00	0.00	B3
ATOM 2386 CA GLN 346	21.156	14.586	13.758	1.00	33.46	B3
ATOM 2387 CB GLN 346	20.899	13.985	15.061	1.00	33.80	B3
ATOM 2388 CG GLN 346	19.459	14.284	15.174	1.00	35.68	B3
ATOM 2389 CD GLN 346	18.788	13.658	16.344	1.00	38.48	B3
ATOM 2390 OE1 GLN 346	19.358	13.328	17.374	1.00	41.78	B3
ATOM 2391 NE2 GLN 346	17.508	13.463	16.167	1.00	41.08	B3
ATOM 2392 HE21 GLN 346	17.088	13.724	15.323	1.00	0.00	B3
ATOM 2393 HE22 GLN 346	17.026	13.063	16.919	1.00	0.00	B3
ATOM 2394 C GLN 346	22.564	15.051	13.773	1.00	35.73	B3
ATOM 2395 O GLN 346	22.766	16.231	14.051	1.00	38.18	B3
ATOM 2396 N ARG 347	23.507	14.190	13.431	1.00	35.57	B3
ATOM 2397 H ARG 347	23.248	13.289	13.157	1.00	0.00	B3
ATOM 2398 CA ARG 347	24.907	14.538	13.396	1.00	35.95	B3
ATOM 2399 CB ARG 347	25.760	13.236	13.222	1.00	36.20	B3
ATOM 2400 CG ARG 347	26.198	12.549	14.540	1.00	37.41	B3
ATOM 2401 CD ARG 347	26.986	11.246	14.373	1.00	39.70	B3
ATOM 2402 NE ARG 347	26.072	10.167	14.028	1.00	47.18	B3
ATOM 2403 HE ARG 347	25.416	9.893	14.701	1.00	0.00	B3
ATOM 2404 CZ ARG 347	26.071	9.516	12.846	1.00	48.49	B3
ATOM 2405 NH1 ARG 347	26.938	9.802	11.882	1.00	50.22	B3
ATOM 2406 HH11 ARG 347	27.602	10.528	12.031	1.00	0.00	B3
ATOM 2407 HH12 ARG 347	26.905	9.313	11.011	1.00	0.00	B3

FIG. 5CC

FIG. 5CC

ATOM 2408 NH2 ARG 347	25.130	8.608	12.574	1.00	48.46	ATOM 2451 CG2 VAL 352	25.021	21.475	7.875	1.00	26.94	B3
ATOM 2409 HH21 ARG 347	24.423	8.408	13.252	1.00	0.00	ATOM 2452 C VAL 352	25.849	23.709	10.890	1.00	29.29	B3
ATOM 2410 HH22 ARG 347	25.126	8.131	11.697	1.00	0.00	ATOM 2453 O VAL 352	26.520	24.747	10.853	1.00	31.02	B3
ATOM 2411 C ARG 347	25.183	15.544	12.267	1.00	35.54	ATOM 2454 N LEU 353	24.923	23.543	11.819	1.00	27.52	B3
ATOM 2412 O ARG 347	25.877	16.549	12.445	1.00	36.73	ATOM 2455 H LEU 353	24.404	22.709	11.838	1.00	0.00	B3
ATOM 2413 N ARG 348	24.611	15.353	11.096	1.00	34.74	ATOM 2456 CA LEU 353	24.635	24.548	12.817	1.00	26.18	B3
ATOM 2414 H ARG 348	24.043	14.559	11.005	1.00	0.00	ATOM 2457 CB LEU 353	23.434	24.113	13.636	1.00	27.87	B3
ATOM 2415 CA ARG 348	24.802	16.225	9.954	1.00	35.24	ATOM 2458 CG LEU 353	22.098	24.034	12.931	1.00	26.54	B3
ATOM 2416 CB ARG 348	24.091	15.623	8.751	1.00	36.76	ATOM 2459 CD1 LEU 353	21.064	23.617	13.924	1.00	25.49	B3
ATOM 2417 CG ARG 348	24.778	14.303	8.450	1.00	44.22	ATOM 2460 CD2 LEU 353	21.750	25.372	12.320	1.00	28.23	B3
ATOM 2418 CD ARG 348	24.014	13.379	7.529	1.00	49.23	ATOM 2461 C LEU 353	25.742	24.905	13.772	1.00	27.17	B3
ATOM 2419 NE ARG 348	24.705	12.090	7.457	1.00	54.27	ATOM 2462 O LEU 353	25.838	26.093	14.088	1.00	28.00	B3
ATOM 2420 HE ARG 348	25.300	11.836	8.193	1.00	0.00	ATOM 2463 N VAL 354	26.539	23.949	14.318	1.00	27.20	B3
ATOM 2421 CZ ARG 348	24.557	11.226	6.430	1.00	53.75	ATOM 2464 H VAL 354	26.321	23.006	14.139	1.00	0.00	B3
ATOM 2422 NH1 ARG 348	23.758	11.479	5.381	1.00	51.85	ATOM 2465 CA VAL 354	27.712	24.212	15.157	1.00	24.62	B3
ATOM 2423 HH11 ARG 348	23.234	12.329	5.339	1.00	0.00	ATOM 2466 CB VAL 354	28.236	22.910	15.745	1.00	22.01	B3
ATOM 2424 HH12 ARG 348	23.680	10.807	4.645	1.00	0.00	ATOM 2467 CG1 VAL 354	29.568	23.089	16.406	1.00	19.82	B3
ATOM 2425 NH2 ARG 348	25.252	10.083	6.462	1.00	54.51	ATOM 2468 CG2 VAL 354	27.276	22.467	16.802	1.00	23.96	B3
ATOM 2426 HH21 ARG 348	25.169	9.424	5.714	1.00	0.00	ATOM 2469 C VAL 354	28.812	24.893	14.332	1.00	25.46	B3
ATOM 2427 HH22 ARG 348	25.860	9.894	7.232	1.00	0.00	ATOM 2470 O VAL 354	29.439	25.832	14.798	1.00	26.23	B3
ATOM 2428 C ARG 348	24.283	17.629	10.237	1.00	34.80	ATOM 2471 N ALA 355	29.059	24.530	13.089	1.00	26.12	B3
ATOM 2429 O ARG 348	25.078	18.564	10.219	1.00	35.16	ATOM 2472 H ALA 355	28.579	23.745	12.744	1.00	0.00	B3
ATOM 2430 N ALA 349	23.008	17.795	10.607	1.00	33.85	ATOM 2473 CA ALA 355	30.025	25.180	12.235	1.00	26.54	B3
ATOM 2431 H ALA 349	22.470	16.984	10.755	1.00	0.00	ATOM 2474 CB ALA 355	30.034	24.591	10.869	1.00	22.08	B3
ATOM 2432 CA ALA 349	22.352	19.083	10.853	1.00	32.96	ATOM 2475 C ALA 355	29.533	26.601	12.096	1.00	28.51	B3
ATOM 2433 CB ALA 349	20.809	18.894	11.070	1.00	33.36	ATOM 2476 O ALA 355	30.315	27.498	12.344	1.00	31.93	B3
ATOM 2434 C ALA 349	22.945	19.746	12.083	1.00	31.84	ATOM 2477 N SER 356	28.271	26.884	11.802	1.00	30.30	B3
ATOM 2435 O ALA 349	22.981	20.969	12.210	1.00	30.69	ATOM 2478 H SER 356	27.654	26.134	11.665	1.00	0.00	B3
ATOM 2436 N GLY 350	23.444	18.954	13.018	1.00	31.30	ATOM 2479 CA SER 356	27.778	28.249	11.625	1.00	31.10	B3
ATOM 2437 H GLY 350	23.308	17.984	12.976	1.00	0.00	ATOM 2480 CB SER 356	26.401	28.147	11.016	1.00	35.23	B3
ATOM 2438 CA GLY 350	24.117	19.505	14.181	1.00	31.08	ATOM 2481 OG SER 356	25.679	29.380	10.905	1.00	43.82	B3
ATOM 2439 C GLY 350	25.462	20.025	13.753	1.00	30.79	ATOM 2482 HG SER 356	26.250	30.004	10.429	1.00	0.00	B3
ATOM 2440 O GLY 350	25.974	21.010	14.280	1.00	31.38	ATOM 2483 C SER 356	27.763	29.095	12.901	1.00	29.75	B3
ATOM 2441 N GLY 351	25.991	19.374	12.731	1.00	30.03	ATOM 2484 O SER 356	28.115	30.289	12.898	1.00	28.35	B3
ATOM 2442 H GLY 351	25.546	18.582	12.367	1.00	0.00	ATOM 2485 N HIS 357	27.465	28.464	14.025	1.00	27.82	B3
ATOM 2443 CA GLY 351	27.263	19.735	12.184	1.00	29.95	ATOM 2486 H HIS 357	27.301	27.498	14.019	1.00	0.00	B3
ATOM 2444 C GLY 351	27.182	21.097	11.534	1.00	29.25	ATOM 2487 CA HIS 357	27.434	29.194	15.259	1.00	26.58	B3
ATOM 2445 O GLY 351	27.937	21.974	11.919	1.00	28.73	ATOM 2488 CB HIS 357	26.735	28.365	16.305	1.00	25.77	B3
ATOM 2446 N VAL 352	26.336	21.285	10.522	1.00	28.92	ATOM 2489 CG HIS 357	25.219	28.360	16.063	1.00	27.67	B3
ATOM 2447 H VAL 352	25.859	20.484	10.214	1.00	0.00	ATOM 2490 CD2 HIS 357	24.563	28.767	14.915	1.00	28.94	B3
ATOM 2448 CA VAL 352	26.079	22.567	9.881	1.00	28.59	ATOM 2491 ND1 HIS 357	24.277	27.963	16.915	1.00	28.43	B3
ATOM 2449 CB VAL 352	24.845	22.452	9.004	1.00	28.96	ATOM 2492 HD1 HIS 357	24.456	27.622	17.828	1.00	0.00	B3
ATOM 2450 CG1 VAL 352	24.627	23.785	8.346	1.00	30.86	ATOM 2493 CE1 HIS 357	23.112	28.103	16.337	1.00	28.64	B3

FIG. 5DD

ATOM 2494 NE2 HIS 357	23.298	28.589	15.130	1.00	29.48	B3	ATOM 2537 C PHE 361	32.505	34.143	17.385	1.00	26.56	B3
ATOM 2495 HE2 HIS 357	22.576	28.801	14.495	1.00	0.00	B3	ATOM 2538 O PHE 361	32.914	34.979	18.183	1.00	26.76	B3
ATOM 2496 C HIS 357	28.852	29.506	15.645	1.00	27.93	B3	ATOM 2539 N LEU 362	33.309	33.645	16.441	1.00	28.17	B3
ATOM 2497 O HIS 357	29.119	30.606	16.115	1.00	29.15	B3	ATOM 2540 H LEU 362	32.962	32.921	15.874	1.00	0.00	B3
ATOM 2498 N LEU 358	29.830	28.637	15.383	1.00	28.33	B3	ATOM 2541 CA LEU 362	34.679	34.089	16.222	1.00	28.89	B3
ATOM 2499 H LEU 358	29.624	27.761	14.997	1.00	0.00	B3	ATOM 2542 CB LEU 362	35.452	33.125	15.338	1.00	28.18	B3
ATOM 2500 CA LEU 358	31.211	28.940	15.721	1.00	26.39	B3	ATOM 2543 CG LEU 362	35.603	31.656	15.781	1.00	29.61	B3
ATOM 2501 CB LEU 358	32.030	27.702	15.547	1.00	21.42	B3	ATOM 2544 CD1 LEU 362	36.306	30.996	14.633	1.00	31.63	B3
ATOM 2502 CG LEU 358	33.457	27.878	15.734	1.00	20.42	B3	ATOM 2545 CD2 LEU 362	36.374	31.433	17.055	1.00	26.38	B3
ATOM 2503 CD1 LEU 358	33.805	28.078	17.165	1.00	16.79	B3	ATOM 2546 C LEU 362	34.692	35.449	15.536	1.00	29.18	B3
ATOM 2504 CD2 LEU 358	34.075	26.714	15.072	1.00	22.89	B3	ATOM 2547 O LEU 362	35.649	36.202	15.748	1.00	27.43	B3
ATOM 2505 C LEU 358	31.721	30.067	14.822	1.00	26.45	B3	ATOM 2548 N GLU 363	33.664	35.763	14.710	1.00	29.54	B3
ATOM 2506 O LEU 358	32.372	30.939	15.378	1.00	27.12	B3	ATOM 2549 H GLU 363	33.009	35.066	14.495	1.00	0.00	B3
ATOM 2507 N GLN 359	31.460	30.130	13.518	1.00	26.41	B3	ATOM 2550 CA GLU 363	33.496	37.090	14.145	1.00	30.30	B3
ATOM 2508 H GLN 359	31.048	29.337	13.114	1.00	0.00	B3	ATOM 2551 CB GLU 363	32.357	37.147	13.228	1.00	30.90	B3
ATOM 2509 CA GLN 359	31.863	31.254	12.671	1.00	29.10	B3	ATOM 2552 CG GLU 363	32.763	36.735	11.849	1.00	38.69	B3
ATOM 2510 CB GLN 359	31.204	31.209	11.292	1.00	30.49	B3	ATOM 2553 CD GLU 363	33.642	37.662	11.013	1.00	42.62	B3
ATOM 2511 CG GLN 359	31.395	29.952	10.455	1.00	38.94	B3	ATOM 2554 OE1 GLU 363	33.896	37.282	9.860	1.00	46.58	B3
ATOM 2512 CD GLN 359	32.842	29.636	10.091	1.00	42.09	B3	ATOM 2555 OE2 GLU 363	34.051	38.734	11.488	1.00	46.47	B3
ATOM 2513 OE1 GLN 359	33.774	29.979	10.821	1.00	46.15	B3	ATOM 2556 C GLU 363	33.229	38.098	15.244	1.00	30.19	B3
ATOM 2514 NE2 GLN 359	33.103	28.987	8.967	1.00	41.34	B3	ATOM 2557 O GLU 363	33.837	39.167	15.239	1.00	30.26	B3
ATOM 2515 HE21 GLN 359	32.341	28.706	8.412	1.00	0.00	B3	ATOM 2558 N VAL 364	32.397	37.726	16.217	1.00	30.04	B3
ATOM 2516 HE22 GLN 359	34.039	28.838	8.740	1.00	0.00	B3	ATOM 2559 H VAL 364	31.888	36.898	16.100	1.00	0.00	B3
ATOM 2517 C GLN 359	31.512	32.621	13.254	1.00	29.39	B3	ATOM 2560 CA VAL 364	32.178	38.522	17.400	1.00	31.90	B3
ATOM 2518 O GLN 359	32.427	33.427	13.484	1.00	30.06	B3	ATOM 2561 CB VAL 364	31.014	38.021	18.269	1.00	31.41	B3
ATOM 2519 N SER 360	30.201	32.810	13.528	1.00	28.66	B3	ATOM 2562 CG1 VAL 364	30.860	38.811	19.562	1.00	30.73	B3
ATOM 2520 H SER 360	29.595	32.061	13.343	1.00	0.00	B3	ATOM 2563 CG2 VAL 364	29.750	38.200	17.497	1.00	29.96	B3
ATOM 2521 CA SER 360	29.570	34.003	14.071	1.00	27.31	B3	ATOM 2564 C VAL 364	33.402	38.493	18.275	1.00	35.89	B3
ATOM 2522 CB SER 360	28.121	33.761	14.336	1.00	26.70	B3	ATOM 2565 O VAL 364	33.683	39.535	18.855	1.00	37.54	B3
ATOM 2523 OG SER 360	27.493	33.539	13.078	1.00	29.72	B3	ATOM 2566 N SER 365	34.173	37.421	18.477	1.00	38.25	B3
ATOM 2524 HG SER 360	26.637	33.112	13.288	1.00	0.00	B3	ATOM 2567 H SER 365	33.971	36.577	18.030	1.00	0.00	B3
ATOM 2525 C SER 360	30.202	34.387	15.353	1.00	27.15	B3	ATOM 2568 CA SER 365	35.337	37.478	19.375	1.00	39.61	B3
ATOM 2526 O SER 360	30.575	35.550	15.498	1.00	26.93	B3	ATOM 2569 CB SER 365	36.041	36.113	19.555	1.00	43.00	B3
ATOM 2527 N PHE 361	30.383	33.403	16.246	1.00	25.38	B3	ATOM 2570 OG SER 365	35.201	34.953	19.575	1.00	46.29	B3
ATOM 2528 H PHE 361	30.055	32.499	16.040	1.00	0.00	B3	ATOM 2571 HG SER 365	34.270	35.189	19.644	1.00	0.00	B3
ATOM 2529 CA PHE 361	31.066	33.626	17.517	1.00	25.20	B3	ATOM 2572 C SER 365	36.398	38.418	18.840	1.00	38.21	B3
ATOM 2530 CB PHE 361	31.092	32.335	18.302	1.00	23.30	B3	ATOM 2573 O SER 365	37.103	38.989	19.662	1.00	36.91	B3
ATOM 2531 CG PHE 361	31.796	32.394	19.655	1.00	23.63	B3	ATOM 2574 N TYR 366	36.575	38.540	17.514	1.00	38.00	B3
ATOM 2532 CD1 PHE 361	31.127	32.854	20.777	1.00	22.44	B3	ATOM 2575 H TYR 366	36.079	37.945	16.910	1.00	0.00	B3
ATOM 2533 CD2 PHE 361	33.098	31.931	19.770	1.00	23.35	B3	ATOM 2576 CA TYR 366	37.568	39.463	16.969	1.00	39.85	B3
ATOM 2534 CE1 PHE 361	31.772	32.834	22.000	1.00	22.78	B3	ATOM 2577 CB TYR 366	37.776	39.330	15.436	1.00	38.53	B3
ATOM 2535 CE2 PHE 361	33.719	31.921	21.002	1.00	21.26	B3	ATOM 2578 CG TYR 366	38.662	40.447	14.879	1.00	38.21	B3
ATOM 2536 CZ PHE 361	33.058	32.368	22.114	1.00	19.54	B3	ATOM 2579 CD1 TYR 366	38.104	41.464	14.129	1.00	37.18	B3

FIG. 5EE

ATOM 2580	CE1 TYR 366	38.918	42.495	13.678	1.00	41.77	B3	ATOM 2623	H ARG 370	38.619	42.884	18.957	1.00	0.00	B3
ATOM 2581	CD2 TYR 366	40.021	40.443	15.182	1.00	40.21	B3	ATOM 2624	CA ARG 370	39.819	44.577	18.663	1.00	44.96	B3
ATOM 2582	CE2 TYR 366	40.849	41.466	14.739	1.00	40.76	B3	ATOM 2625	CB ARG 370	39.184	44.569	17.316	1.00	42.06	B3
ATOM 2583	CZ TYR 366	40.297	42.504	13.976	1.00	42.82	B3	ATOM 2626	CG ARG 370	39.424	45.719	16.371	1.00	43.93	B3
ATOM 2584	OH TYR 366	41.151	43.522	13.493	1.00	41.30	B3	ATOM 2627	CD ARG 370	40.894	45.910	16.169	1.00	45.37	B3
ATOM 2585	HH TYR 366	40.743	43.977	12.755	1.00	0.00	B3	ATOM 2628	NE ARG 370	41.219	46.681	14.976	1.00	48.00	B3
ATOM 2586	C TYR 366	37.133	40.893	17.241	1.00	40.55	B3	ATOM 2629	HE ARG 370	40.524	46.867	14.312	1.00	0.00	B3
ATOM 2587	O TYR 366	37.917	41.647	17.798	1.00	40.92	B3	ATOM 2630	CZ ARG 370	42.469	47.153	14.791	1.00	48.45	B3
ATOM 2588	N ARG 367	35.933	41.309	16.853	1.00	41.88	B3	ATOM 2631	NH1 ARG 370	43.443	46.961	15.691	1.00	49.13	B3
ATOM 2589	H ARG 367	35.360	40.682	16.360	1.00	0.00	B3	ATOM 2632	HH11 ARG 370	43.262	46.456	16.534	1.00	0.00	B3
ATOM 2590	CA ARG 367	35.442	42.653	17.139	1.00	43.32	B3	ATOM 2633	HH12 ARG 370	44.357	47.326	15.520	1.00	0.00	B3
ATOM 2591	CB ARG 367	34.013	42.709	16.650	1.00	46.82	B3	ATOM 2634	NH2 ARG 370	42.821	47.710	13.635	1.00	47.59	B3
ATOM 2592	CG ARG 367	33.528	44.130	16.650	1.00	56.74	B3	ATOM 2635	HH21 ARG 370	42.163	47.785	12.889	1.00	0.00	B3
ATOM 2593	CD ARG 367	32.069	44.267	16.248	1.00	61.81	B3	ATOM 2636	HH22 ARG 370	43.751	48.057	13.516	1.00	0.00	B3
ATOM 2594	NE ARG 367	31.723	45.687	16.229	1.00	66.59	B3	ATOM 2637	C ARG 370	39.386	45.740	19.558	1.00	49.12	B3
ATOM 2595	HE ARG 367	32.438	46.356	16.172	1.00	0.00	B3	ATOM 2638	O ARG 370	40.216	46.615	19.826	1.00	49.67	B3
ATOM 2596	CZ ARG 367	30.458	46.091	16.308	1.00	69.75	B3	ATOM 2639	N HIS 371	38.162	45.728	20.123	1.00	52.30	B3
ATOM 2597	NH1 ARG 367	29.448	45.220	16.413	1.00	72.65	B3	ATOM 2640	H HIS 371	37.581	44.955	19.949	1.00	0.00	B3
ATOM 2598	HH1 ARG 367	29.631	44.236	16.410	1.00	0.00	B3	ATOM 2641	CA HIS 371	37.745	46.738	21.080	1.00	56.65	B3
ATOM 2599	HH12 ARG 367	28.503	45.548	16.445	1.00	0.00	B3	ATOM 2642	CB HIS 371	36.284	46.604	21.459	1.00	62.15	B3
ATOM 2600	NH2 ARG 367	30.160	47.375	16.162	1.00	71.64	B3	ATOM 2643	CG HIS 371	35.320	46.991	20.346	1.00	71.70	B3
ATOM 2601	HH21 ARG 367	29.204	47.665	16.222	1.00	0.00	B3	ATOM 2644	CD2 HIS 371	35.596	47.877	19.313	1.00	75.03	B3
ATOM 2602	HH22 ARG 367	30.888	48.043	16.013	1.00	0.00	B3	ATOM 2645	ND1 HIS 371	34.067	46.546	20.166	1.00	75.91	B3
ATOM 2603	C ARG 367	35.551	43.011	18.635	1.00	40.96	B3	ATOM 2646	HD1 HIS 371	33.594	45.897	20.732	1.00	0.00	B3
ATOM 2604	O ARG 367	35.994	44.090	19.012	1.00	41.10	B3	ATOM 2647	CE1 HIS 371	33.580	47.116	19.077	1.00	77.30	B3
ATOM 2605	N VAL 368	35.160	42.135	19.542	1.00	39.83	B3	ATOM 2648	NE2 HIS 371	34.507	47.914	18.573	1.00	77.52	B3
ATOM 2606	H VAL 368	34.726	41.316	19.217	1.00	0.00	B3	ATOM 2649	HE2 HIS 371	34.401	48.460	17.764	1.00	0.00	B3
ATOM 2607	CA VAL 368	35.331	42.292	20.968	1.00	37.33	B3	ATOM 2650	C HIS 371	38.533	46.669	22.382	1.00	56.97	B3
ATOM 2608	CB VAL 368	34.748	41.043	21.664	1.00	35.75	B3	ATOM 2651	O HIS 371	38.458	47.592	23.176	1.00	58.12	B3
ATOM 2609	CG1 VAL 368	35.087	40.867	23.140	1.00	35.10	B3	ATOM 2652	N LEU 372	39.271	45.632	22.715	1.00	56.98	B3
ATOM 2610	CG2 VAL 368	33.259	41.230	21.586	1.00	33.28	B3	ATOM 2653	H LEU 372	39.302	44.855	22.122	1.00	0.00	B3
ATOM 2611	C VAL 368	36.813	42.459	21.223	1.00	38.75	B3	ATOM 2654	CA LEU 372	40.048	45.597	23.939	1.00	57.77	B3
ATOM 2612	O VAL 368	37.144	43.498	21.772	1.00	40.11	B3	ATOM 2655	CB LEU 372	39.725	44.272	24.633	1.00	57.29	B3
ATOM 2613	N LEU 369	37.759	41.600	20.835	1.00	39.59	B3	ATOM 2656	CG LEU 372	38.566	44.144	25.611	1.00	55.87	B3
ATOM 2614	H LEU 369	37.492	40.818	20.308	1.00	0.00	B3	ATOM 2657	CD1 LEU 372	37.358	44.892	25.123	1.00	55.77	B3
ATOM 2615	CA LEU 369	39.180	41.780	21.148	1.00	40.05	B3	ATOM 2658	CD2 LEU 372	38.211	42.675	25.749	1.00	55.33	B3
ATOM 2616	CB LEU 369	39.984	40.601	20.679	1.00	37.15	B3	ATOM 2659	C LEU 372	41.554	45.755	23.647	1.00	58.81	B3
ATOM 2617	CG LEU 369	39.831	39.335	21.426	1.00	37.54	B3	ATOM 2660	O LEU 372	42.447	45.475	24.476	1.00	59.12	B3
ATOM 2618	CD1 LEU 369	40.349	38.238	20.528	1.00	39.70	B3	ATOM 2661	N ALA 373	41.942	46.168	22.447	1.00	59.27	B3
ATOM 2619	CD2 LEU 369	40.563	39.394	22.747	1.00	36.86	B3	ATOM 2662	H ALA 373	41.271	46.255	21.731	1.00	0.00	B3
ATOM 2620	C LEU 369	39.817	43.031	20.542	1.00	41.88	B3	ATOM 2663	CA ALA 373	43.336	46.425	22.147	1.00	60.03	B3
ATOM 2621	O LEU 369	40.711	43.654	21.144	1.00	41.30	B3	ATOM 2664	CB ALA 373	43.755	45.485	21.021	1.00	59.87	B3
ATOM 2622	N ARG 370	39.333	43.413	19.354	1.00	42.80	B3	ATOM 2665	C ALA 373	43.616	47.895	21.762	1.00	61.22	B3

FIG. 5FF

ATOM 2666	OTI ALA 373	44.798	48.243	21.697	1.00	62.45	B3	ATOM 2709	CB PHE 414	26.959	50.915	5.232	1.00	40.76	CI
ATOM 2667	OT2 ALA 373	42.682	48.700	21.583	1.00	61.55	B3	ATOM 2710	CG PHE 414	27.633	49.627	4.757	1.00	35.06	CI
ATOM 2668	CB LEU 410	23.866	49.243	1.118	1.00	53.10	CI	ATOM 2711	CD1 PHE 414	27.583	49.256	3.425	1.00	34.71	CI
ATOM 2669	CG LEU 410	23.982	47.812	0.738	1.00	51.85	CI	ATOM 2712	CD2 PHE 414	28.262	48.800	5.663	1.00	34.81	CI
ATOM 2670	CD1 LEU 410	25.074	47.596	-0.330	1.00	52.64	CI	ATOM 2713	CE1 PHE 414	28.156	48.056	3.014	1.00	36.16	CI
ATOM 2671	CD2 LEU 410	24.125	47.081	2.058	1.00	49.28	CI	ATOM 2714	CE2 PHE 414	28.832	47.602	5.247	1.00	33.40	CI
ATOM 2672	C LEU 410	22.381	51.214	1.635	1.00	52.99	CI	ATOM 2715	CZ PHE 414	28.781	47.223	3.923	1.00	34.22	CI
ATOM 2673	O LEU 410	22.242	52.166	0.845	1.00	53.00	CI	ATOM 2716	C PHE 414	28.667	52.271	4.044	1.00	41.25	CI
ATOM 2674	HT1 LEU 410	22.721	50.836	-0.665	1.00	0.00	CI	ATOM 2717	O PHE 414	29.831	51.902	4.110	1.00	41.47	CI
ATOM 2675	HT2 LEU 410	21.194	50.178	-0.557	1.00	0.00	CI	ATOM 2718	N LEU 415	28.122	52.748	2.942	1.00	39.50	CI
ATOM 2676	N LEU 410	22.198	49.968	-0.415	1.00	54.31	CI	ATOM 2719	H LEU 415	27.188	53.044	2.946	1.00	0.00	CI
ATOM 2677	HT3 LEU 410	22.529	49.174	-0.998	1.00	0.00	CI	ATOM 2720	CA LEU 415	28.865	52.769	1.721	1.00	39.91	CI
ATOM 2678	CA LEU 410	22.478	49.815	1.004	1.00	53.64	CI	ATOM 2721	CB LEU 415	27.946	53.205	0.641	1.00	41.98	CI
ATOM 2679	N PRO 411	22.450	51.433	2.965	1.00	52.95	CI	ATOM 2722	CG LEU 415	27.903	52.274	-0.526	1.00	44.75	CI
ATOM 2680	CD PRO 411	22.466	50.407	4.022	1.00	52.54	CI	ATOM 2723	CD1 LEU 415	26.430	51.951	-0.780	1.00	42.93	CI
ATOM 2681	CA PRO 411	22.666	52.766	3.548	1.00	53.25	CI	ATOM 2724	CD2 LEU 415	28.793	52.853	-1.648	1.00	45.91	CI
ATOM 2682	CB PRO 411	22.688	52.541	5.068	1.00	52.85	CI	ATOM 2725	C LEU 415	30.081	53.669	1.755	1.00	40.03	CI
ATOM 2683	CG PRO 411	23.163	51.108	5.203	1.00	52.83	CI	ATOM 2726	O LEU 415	31.142	53.348	1.183	1.00	40.28	CI
ATOM 2684	C PRO 411	23.958	53.413	3.023	1.00	53.47	CI	ATOM 2727	N LEU 416	29.901	54.779	2.487	1.00	37.46	CI
ATOM 2685	O PRO 411	25.073	52.878	3.167	1.00	54.02	CI	ATOM 2728	H LEU 416	29.028	54.948	2.899	1.00	0.00	CI
ATOM 2686	N GLN 412	23.787	54.599	2.411	1.00	52.79	CI	ATOM 2729	CA LEU 416	30.942	55.756	2.602	1.00	34.05	CI
ATOM 2687	H GLN 412	22.863	54.900	2.294	1.00	0.00	CI	ATOM 2730	CB LEU 416	30.294	57.089	2.998	1.00	34.67	CI
ATOM 2688	CA GLN 412	24.873	55.413	1.871	1.00	50.44	CI	ATOM 2731	CG LEU 416	29.438	57.704	1.851	1.00	35.24	CI
ATOM 2689	CB GLN 412	24.387	56.762	1.413	1.00	52.47	CI	ATOM 2732	CD1 LEU 416	28.770	58.948	2.358	1.00	31.87	CI
ATOM 2690	CG GLN 412	25.364	57.408	0.437	1.00	56.51	CI	ATOM 2733	CD2 LEU 416	30.310	57.948	0.593	1.00	35.50	CI
ATOM 2691	CD GLN 412	25.228	56.954	-1.017	1.00	59.40	CI	ATOM 2734	C LEU 416	31.952	55.258	3.586	1.00	31.97	CI
ATOM 2692	OE1 GLN 412	25.869	57.506	-1.913	1.00	59.67	CI	ATOM 2735	O LEU 416	33.131	55.427	3.270	1.00	33.32	CI
ATOM 2693	NE2 GLN 412	24.336	56.022	-1.389	1.00	60.12	CI	ATOM 2736	N ALA 417	31.573	54.619	4.695	1.00	29.05	CI
ATOM 2694	HE21 GLN 412	23.734	55.616	-0.737	1.00	0.00	CI	ATOM 2737	H ALA 417	30.621	54.616	4.927	1.00	0.00	CI
ATOM 2695	HE22 GLN 412	24.396	55.748	-2.328	1.00	0.00	CI	ATOM 2738	CA ALA 417	32.524	53.882	5.561	1.00	29.64	CI
ATOM 2696	C GLN 412	25.930	55.646	2.916	1.00	48.22	CI	ATOM 2739	CB ALA 417	31.853	53.087	6.680	1.00	25.16	CI
ATOM 2697	O GLN 412	27.089	55.591	2.545	1.00	46.78	CI	ATOM 2740	C ALA 417	33.319	52.827	4.777	1.00	30.68	CI
ATOM 2698	N SER 413	25.614	55.842	4.201	1.00	47.90	CI	ATOM 2741	O ALA 417	34.536	52.721	4.877	1.00	31.52	CI
ATOM 2699	H SER 413	24.693	55.976	4.492	1.00	0.00	CI	ATOM 2742	N CYS 418	32.726	52.041	3.905	1.00	32.19	CI
ATOM 2700	CA SER 413	26.696	55.984	5.144	1.00	48.75	CI	ATOM 2743	H CYS 418	31.748	52.017	3.860	1.00	0.00	CI
ATOM 2701	CB SER 413	26.261	56.344	6.548	1.00	50.61	CI	ATOM 2744	CA CYS 418	33.499	51.119	3.103	1.00	33.67	CI
ATOM 2702	OG SER 413	27.378	56.872	7.301	1.00	53.05	CI	ATOM 2745	CB CYS 418	32.657	50.250	2.226	1.00	33.85	CI
ATOM 2703	HG SER 413	28.178	56.355	7.145	1.00	0.00	CI	ATOM 2746	SG CYS 418	31.623	49.208	3.246	1.00	37.80	CI
ATOM 2704	C SER 413	27.480	54.684	5.267	1.00	48.71	CI	ATOM 2747	C CYS 418	34.446	51.818	2.170	1.00	34.80	CI
ATOM 2705	O SER 413	28.698	54.839	5.392	1.00	50.77	CI	ATOM 2748	O CYS 418	35.626	51.441	2.173	1.00	36.47	CI
ATOM 2706	N PHE 414	26.947	53.440	5.208	1.00	46.01	CI	ATOM 2749	N LEU 419	34.009	52.820	1.377	1.00	35.00	CI
ATOM 2707	H PHE 414	25.996	53.323	5.015	1.00	0.00	CI	ATOM 2750	H LEU 419	33.082	53.131	1.460	1.00	0.00	CI
ATOM 2708	CA PHE 414	27.787	52.233	5.274	1.00	42.92	CI	ATOM 2751	CA LEU 419	34.886	53.446	0.375	1.00	34.14	CI

FIG. 5GG

ATOM 2752	CB LEU 419	34.062	54.484	-0.413	1.00	37.09	CI	ATOM 2795	HE ARG 423	39.168	56.173	-2.989	1.00	0.00	CI
ATOM 2753	CG LEU 419	32.866	53.853	-1.244	1.00	39.61	CI	ATOM 2796	CZ ARG 423	39.629	54.928	-4.466	1.00	27.32	CI
ATOM 2754	CD1 LEU 419	31.866	54.918	-1.609	1.00	39.24	CI	ATOM 2797	NH1 ARG 423	40.264	53.857	-4.949	1.00	26.37	CI
ATOM 2755	CD2 LEU 419	33.349	53.207	-2.553	1.00	40.02	CI	ATOM 2798	HH11 ARG 423	40.884	53.341	-4.365	1.00	0.00	CI
ATOM 2756	C LEU 419	36.102	54.041	1.047	1.00	32.33	CI	ATOM 2799	HH12 ARG 423	40.150	53.595	-5.907	1.00	0.00	CI
ATOM 2757	O LEU 419	37.198	53.973	0.549	1.00	31.60	CI	ATOM 2800	NH2 ARG 423	38.960	55.682	-5.325	1.00	30.38	CI
ATOM 2758	N GLU 420	35.974	54.483	2.273	1.00	31.92	CI	ATOM 2801	HH21 ARG 423	38.539	56.537	-5.023	1.00	0.00	CI
ATOM 2759	H GLU 420	35.068	54.528	2.648	1.00	0.00	CI	ATOM 2802	HH22 ARG 423	38.865	55.385	-6.275	1.00	0.00	CI
ATOM 2760	CA GLU 420	37.078	54.905	3.092	1.00	31.79	CI	ATOM 2803	C ARG 423	42.429	53.241	1.432	1.00	23.60	CI
ATOM 2761	CB GLU 420	36.477	55.462	4.344	1.00	34.29	CI	ATOM 2804	O ARG 423	43.594	53.147	1.127	1.00	24.37	CI
ATOM 2762	CG GLU 420	37.430	56.240	5.185	1.00	38.66	CI	ATOM 2805	N LYS 424	42.065	53.050	2.668	1.00	24.38	CI
ATOM 2763	CD GLU 420	36.952	56.499	6.609	1.00	45.20	CI	ATOM 2806	H LYS 424	41.109	53.051	2.890	1.00	0.00	CI
ATOM 2764	OE1 GLU 420	37.873	56.849	7.367	1.00	45.67	CI	ATOM 2807	CA LYS 424	43.043	52.855	3.722	1.00	25.12	CI
ATOM 2765	OE2 GLU 420	35.745	56.345	6.954	1.00	44.21	CI	ATOM 2808	CB LYS 424	42.352	52.791	5.051	1.00	23.89	CI
ATOM 2766	C GLU 420	38.043	53.763	3.423	1.00	31.87	CI	ATOM 2809	CG LYS 424	43.312	52.936	6.190	1.00	28.56	CI
ATOM 2767	O GLU 420	39.253	53.949	3.270	1.00	32.82	CI	ATOM 2810	CD LYS 424	42.579	52.580	7.486	1.00	35.51	CI
ATOM 2768	N GLN 421	37.553	52.624	3.954	1.00	30.46	CI	ATOM 2811	CE LYS 424	41.338	53.425	7.853	1.00	40.33	CI
ATOM 2769	H GLN 421	36.583	52.556	4.098	1.00	0.00	CI	ATOM 2812	NZ LYS 424	40.519	52.722	8.834	1.00	42.23	CI
ATOM 2770	CA GLN 421	38.366	51.461	4.283	1.00	29.34	CI	ATOM 2813	HZ1 LYS 424	41.079	52.559	9.695	1.00	0.00	CI
ATOM 2771	CG GLN 421	37.545	50.389	4.984	1.00	30.88	CI	ATOM 2814	HZ2 LYS 424	40.208	51.814	8.435	1.00	0.00	CI
ATOM 2772	CG GLN 421	37.308	50.634	6.463	1.00	33.58	CI	ATOM 2815	HZ3 LYS 424	39.689	53.306	9.065	1.00	0.00	CI
ATOM 2773	CD GLN 421	36.320	49.625	7.058	1.00	37.89	CI	ATOM 2816	C LYS 424	43.761	51.547	3.462	1.00	27.10	CI
ATOM 2774	OE1 GLN 421	35.357	49.236	6.398	1.00	43.18	CI	ATOM 2817	O LYS 424	44.923	51.425	3.848	1.00	30.64	CI
ATOM 2775	NE2 GLN 421	36.427	49.095	8.275	1.00	37.13	CI	ATOM 2818	N ILE 425	43.190	50.542	2.794	1.00	26.83	CI
ATOM 2776	HE21 GLN 421	35.695	48.505	8.556	1.00	0.00	CI	ATOM 2819	H ILE 425	42.260	50.607	2.488	1.00	0.00	CI
ATOM 2777	HE22 GLN 421	37.207	49.330	8.812	1.00	0.00	CI	ATOM 2820	CA ILE 425	43.949	49.312	2.561	1.00	25.46	CI
ATOM 2778	C GLN 421	38.991	50.862	3.026	1.00	27.36	CI	ATOM 2821	CB ILE 425	42.965	48.093	2.336	1.00	24.91	CI
ATOM 2779	O GLN 421	40.152	50.445	3.099	1.00	29.09	CI	ATOM 2822	CG2 ILE 425	43.654	46.786	1.995	1.00	22.01	CI
ATOM 2780	N VAL 422	38.379	50.845	1.847	1.00	23.57	CI	ATOM 2823	CG1 ILE 425	42.229	47.909	3.633	1.00	25.34	CI
ATOM 2781	H VAL 422	37.448	51.138	1.803	1.00	0.00	CI	ATOM 2824	CD ILE 425	40.885	47.169	3.432	1.00	25.68	CI
ATOM 2782	CA VAL 422	39.077	50.420	0.651	1.00	23.52	CI	ATOM 2825	C ILE 425	44.824	49.549	1.346	1.00	23.84	CI
ATOM 2783	CB VAL 422	38.163	50.636	-0.556	1.00	22.67	CI	ATOM 2826	O ILE 425	45.959	49.069	1.316	1.00	24.57	CI
ATOM 2784	CG1 VAL 422	38.873	50.455	-1.868	1.00	21.56	CI	ATOM 2827	N GLN 426	44.361	50.267	0.323	1.00	23.28	CI
ATOM 2785	CG2 VAL 422	37.057	49.610	-0.465	1.00	26.79	CI	ATOM 2828	H GLN 426	43.451	50.630	0.393	1.00	0.00	CI
ATOM 2786	C VAL 422	40.353	51.254	0.514	1.00	26.22	CI	ATOM 2829	CA GLN 426	45.164	50.531	-0.871	1.00	24.13	CI
ATOM 2787	O VAL 422	41.458	50.708	0.508	1.00	28.77	CI	ATOM 2830	CB GLN 426	44.421	51.344	-1.896	1.00	24.04	CI
ATOM 2788	N ARG 423	40.275	52.599	0.575	1.00	27.49	CI	ATOM 2831	CG GLN 426	43.275	50.539	-2.396	1.00	23.56	CI
ATOM 2789	H ARG 423	39.402	53.016	0.735	1.00	0.00	CI	ATOM 2832	CD GLN 426	42.446	51.105	-3.511	1.00	23.92	CI
ATOM 2790	CA ARG 423	41.436	53.456	0.346	1.00	25.91	CI	ATOM 2833	OE1 GLN 426	41.704	52.047	-3.345	1.00	25.34	CI
ATOM 2791	CB ARG 423	41.098	54.943	0.312	1.00	24.39	CI	ATOM 2834	NE2 GLN 426	42.337	50.509	-4.672	1.00	27.55	CI
ATOM 2792	CG ARG 423	40.167	55.366	-0.807	1.00	22.81	CI	ATOM 2835	HE21 GLN 426	41.755	50.948	-5.323	1.00	0.00	CI
ATOM 2793	CD ARG 423	40.525	54.798	-2.172	1.00	25.55	CI	ATOM 2836	HE22 GLN 426	42.850	49.696	-4.851	1.00	0.00	CI
ATOM 2794	NE ARG 423	39.707	55.387	-3.216	1.00	25.38	CI	ATOM 2837	C GLN 426	46.404	51.312	-0.488	1.00	26.69	CI

FIG. 5HH

ATOM 2838	O	GLN	426	47.486	51.109	-1.046	1.00	29.73	CI	ATOM 2881	CA	GLN	433	55.002	47.526	-2.600	1.00	35.83	CI
ATOM 2839	N	GLY	427	46.300	52.204	0.499	1.00	26.49	CI	ATOM 2882	CB	GLN	433	53.999	47.892	-3.664	1.00	35.52	CI
ATOM 2840	H	GLY	427	45.410	52.414	0.854	1.00	0.00	CI	ATOM 2883	CG	GLN	433	52.996	46.823	-3.832	1.00	39.40	CI
ATOM 2841	CA	GLY	427	47.446	52.894	1.022	1.00	24.25	CI	ATOM 2884	CD	GLN	433	52.049	47.097	-4.973	1.00	42.46	CI
ATOM 2842	C	GLY	427	48.467	51.913	1.589	1.00	23.08	CI	ATOM 2885	OE1	GLN	433	50.924	47.526	-4.786	1.00	48.22	CI
ATOM 2843	O	GLY	427	49.597	51.921	1.106	1.00	22.28	CI	ATOM 2886	NE2	GLN	433	52.376	46.878	-6.225	1.00	44.77	CI
ATOM 2844	N	ASP	428	48.107	51.073	2.575	1.00	22.75	CI	ATOM 2887	HE21	GLN	433	53.271	46.540	-6.433	1.00	0.00	CI
ATOM 2845	H	ASP	428	47.189	51.111	2.918	1.00	0.00	CI	ATOM 2888	HE22	GLN	433	51.693	47.087	-6.892	1.00	0.00	CI
ATOM 2846	CA	ASP	428	49.039	50.108	3.131	1.00	23.87	CI	ATOM 2889	C	GLN	433	56.177	48.485	-2.757	1.00	36.48	CI
ATOM 2847	CB	ASP	428	48.415	49.199	4.117	1.00	26.52	CI	ATOM 2890	O	GLN	433	57.214	48.118	-3.312	1.00	38.08	CI
ATOM 2848	CG	ASP	428	47.437	49.779	5.097	1.00	28.84	CI	ATOM 2891	N	GLU	434	56.055	49.719	-2.287	1.00	36.11	CI
ATOM 2849	OD1	ASP	428	46.420	49.151	5.265	1.00	31.81	CI	ATOM 2892	H	GLU	434	55.210	49.978	-1.854	1.00	0.00	CI
ATOM 2850	OD2	ASP	428	47.662	50.804	5.716	1.00	30.77	CI	ATOM 2893	CA	GLU	434	57.089	50.719	-2.426	1.00	35.93	CI
ATOM 2851	C	ASP	428	49.626	49.191	2.063	1.00	24.16	CI	ATOM 2894	CB	GLU	434	56.408	52.030	-2.068	1.00	41.28	CI
ATOM 2852	O	ASP	428	50.812	48.896	2.088	1.00	26.17	CI	ATOM 2895	CG	GLU	434	57.126	53.356	-2.019	1.00	43.07	CI
ATOM 2853	N	GLY	429	48.840	48.822	1.069	1.00	23.01	CI	ATOM 2896	CD	GLU	434	57.832	53.516	-0.698	1.00	45.70	CI
ATOM 2854	H	GLY	429	47.905	49.113	1.071	1.00	0.00	CI	ATOM 2897	OE1	GLU	434	57.190	53.538	0.367	1.00	49.33	CI
ATOM 2855	CA	GLY	429	49.289	47.964	0.029	1.00	25.44	CI	ATOM 2898	OE2	GLU	434	59.051	53.579	-0.760	1.00	45.45	CI
ATOM 2856	C	GLY	429	50.405	48.649	-0.716	1.00	27.39	CI	ATOM 2899	C	GLU	434	58.257	50.348	-1.548	1.00	34.00	CI
ATOM 2857	O	GLY	429	51.528	48.135	-0.741	1.00	28.51	CI	ATOM 2900	O	GLU	434	59.388	50.481	-1.983	1.00	32.93	CI
ATOM 2858	N	ALA	430	50.127	49.840	-1.271	1.00	28.26	CI	ATOM 2901	N	LYS	435	58.067	49.860	-0.330	1.00	34.34	CI
ATOM 2859	H	ALA	430	49.216	50.185	-1.172	1.00	0.00	CI	ATOM 2902	H	LYS	435	57.146	49.837	0.014	1.00	0.00	CI
ATOM 2860	CA	ALA	430	51.094	50.643	-2.015	1.00	26.04	CI	ATOM 2903	CA	LYS	435	59.151	49.358	0.511	1.00	34.56	CI
ATOM 2861	CB	ALA	430	50.490	51.976	-2.407	1.00	27.93	CI	ATOM 2904	CB	LYS	435	58.577	49.010	1.847	1.00	33.89	CI
ATOM 2862	C	ALA	430	52.300	50.927	-1.133	1.00	25.19	CI	ATOM 2905	CG	LYS	435	58.357	50.231	2.709	1.00	36.71	CI
ATOM 2863	O	ALA	430	53.393	51.053	-1.655	1.00	25.43	CI	ATOM 2906	CD	LYS	435	58.244	49.748	4.137	1.00	40.31	CI
ATOM 2864	N	ALA	431	52.171	50.979	0.186	1.00	24.05	CI	ATOM 2907	CE	LYS	435	58.293	50.861	5.213	1.00	45.32	CI
ATOM 2865	H	ALA	431	51.279	50.872	0.579	1.00	0.00	CI	ATOM 2908	NZ	LYS	435	58.494	50.325	6.575	1.00	47.31	CI
ATOM 2866	CA	ALA	431	53.295	51.213	1.035	1.00	26.29	CI	ATOM 2909	HZ1	LYS	435	59.388	49.795	6.611	1.00	0.00	CI
ATOM 2867	CB	ALA	431	52.874	51.522	2.458	1.00	24.14	CI	ATOM 2910	HZ2	LYS	435	57.708	49.689	6.818	1.00	0.00	CI
ATOM 2868	C	ALA	431	54.139	49.972	1.073	1.00	29.82	CI	ATOM 2911	HZ3	LYS	435	58.534	51.109	7.257	1.00	0.00	CI
ATOM 2869	O	ALA	431	55.360	50.085	0.959	1.00	31.97	CI	ATOM 2912	C	LYS	435	59.906	48.135	-0.065	1.00	36.10	CI
ATOM 2870	N	LEU	432	53.562	48.777	1.203	1.00	31.87	CI	ATOM 2913	O	LYS	435	61.139	48.036	-0.012	1.00	37.08	CI
ATOM 2871	H	LEU	432	52.585	48.726	1.279	1.00	0.00	CI	ATOM 2914	N	LEU	436	59.215	47.168	-0.665	1.00	36.28	CI
ATOM 2872	CA	LEU	432	54.337	47.540	1.165	1.00	33.92	CI	ATOM 2915	H	LEU	436	58.235	47.245	-0.651	1.00	0.00	CI
ATOM 2873	CB	LEU	432	53.430	46.315	1.301	1.00	37.42	CI	ATOM 2916	CA	LEU	436	59.793	45.994	-1.304	1.00	34.25	CI
ATOM 2874	CG	LEU	432	54.063	44.952	1.574	1.00	37.40	CI	ATOM 2917	CB	LEU	436	58.655	45.076	-1.753	1.00	33.41	CI
ATOM 2875	CD1	LEU	432	54.751	44.949	2.950	1.00	38.10	CI	ATOM 2918	CG	LEU	436	57.920	44.327	-0.610	1.00	34.72	CI
ATOM 2876	CD2	LEU	432	52.966	43.901	1.492	1.00	36.27	CI	ATOM 2919	CD1	LEU	436	56.764	43.538	-1.181	1.00	33.50	CI
ATOM 2877	C	LEU	432	55.096	47.404	-0.146	1.00	33.74	CI	ATOM 2920	CD2	LEU	436	58.880	43.375	0.117	1.00	36.39	CI
ATOM 2878	O	LEU	432	56.306	47.179	-0.138	1.00	33.29	CI	ATOM 2921	C	LEU	436	60.669	46.383	-2.467	1.00	33.31	CI
ATOM 2879	N	GLN	433	54.402	47.564	-1.276	1.00	34.57	CI	ATOM 2922	O	LEU	436	61.756	45.825	-2.647	1.00	33.94	CI
ATOM 2880	H	GLN	433	53.439	47.733	-1.186	1.00	0.00	CI	ATOM 2923	N	CYS	437	60.220	47.374	-3.222	1.00	32.34	CI

FIG. 511

ATOM 2924 H CYS 437	59.290	47.661	-3.097	1.00	0.00	CI	ATOM 2967 HZ1 LYS 441	65.568	49.549	-4.506	1.00	0.00	CI
ATOM 2925 CA CYS 437	60.978	47.949	-4.301	1.00	32.01	CI	ATOM 2968 HZ2 LYS 441	65.885	49.525	-6.173	1.00	0.00	CI
ATOM 2926 C CYS 437	62.214	48.704	-3.857	1.00	34.70	CI	ATOM 2969 HZ3 LYS 441	66.468	50.801	-5.219	1.00	0.00	CI
ATOM 2927 O CYS 437	63.313	48.599	-4.412	1.00	36.26	CI	ATOM 2970 C LYS 441	63.629	45.015	-6.425	1.00	28.86	CI
ATOM 2928 CB CYS 437	60.094	48.840	-5.008	1.00	30.97	CI	ATOM 2971 O LYS 441	63.791	44.688	-7.603	1.00	29.95	CI
ATOM 2929 SG CYS 437	61.003	49.666	-6.319	1.00	36.22	CI	ATOM 2972 N LEU 442	62.556	44.601	-5.749	1.00	27.58	CI
ATOM 2930 N ALA 438	62.016	49.463	-2.785	1.00	36.35	CI	ATOM 2973 H LEU 442	62.392	44.924	-4.837	1.00	0.00	CI
ATOM 2931 H ALA 438	61.108	49.547	-2.431	1.00	0.00	CI	ATOM 2974 CA LEU 442	61.554	43.780	-6.402	1.00	28.82	CI
ATOM 2932 CA ALA 438	63.060	50.226	-2.170	1.00	35.83	CI	ATOM 2975 CB LEU 442	60.947	42.694	-5.466	1.00	26.98	CI
ATOM 2933 CB ALA 438	62.440	51.107	-1.153	1.00	36.38	CI	ATOM 2976 CG LEU 442	61.905	41.634	-4.847	1.00	27.75	CI
ATOM 2934 C ALA 438	64.065	49.294	-1.527	1.00	37.01	CI	ATOM 2977 CD1 LEU 442	61.133	40.643	-4.009	1.00	24.29	CI
ATOM 2935 O ALA 438	65.132	49.168	-2.092	1.00	39.39	CI	ATOM 2978 CD2 LEU 442	62.667	40.932	-5.963	1.00	19.72	CI
ATOM 2936 N THR 439	63.808	48.591	-0.422	1.00	36.59	CI	ATOM 2979 C LEU 442	60.575	44.892	-6.635	1.00	30.59	CI
ATOM 2937 H THR 439	62.947	48.723	0.014	1.00	0.00	CI	ATOM 2980 O LEU 442	59.811	45.261	-5.741	1.00	32.36	CI
ATOM 2938 CA THR 439	64.742	47.669	0.223	1.00	35.70	CI	ATOM 2981 N CYS 443	60.700	45.506	-7.804	1.00	32.15	CI
ATOM 2939 CB THR 439	64.073	47.042	1.400	1.00	35.34	CI	ATOM 2982 H CYS 443	61.423	45.199	-8.389	1.00	0.00	CI
ATOM 2940 OG1 THR 439	63.323	48.048	2.040	1.00	38.31	CI	ATOM 2983 CA CYS 443	59.866	46.645	-8.191	1.00	32.69	CI
ATOM 2941 HG1 THR 439	62.419	47.999	1.706	1.00	0.00	CI	ATOM 2984 C CYS 443	58.807	46.380	-9.217	1.00	33.43	CI
ATOM 2942 CG2 THR 439	65.039	46.479	2.369	1.00	36.50	CI	ATOM 2985 O CYS 443	58.051	47.288	-9.465	1.00	34.10	CI
ATOM 2943 C THR 439	65.331	46.517	-0.590	1.00	36.10	CI	ATOM 2986 CB CYS 443	60.715	47.800	-8.743	1.00	30.74	CI
ATOM 2944 O THR 439	66.448	46.093	-0.312	1.00	36.51	CI	ATOM 2987 SG CYS 443	61.938	48.345	-7.519	1.00	32.96	CI
ATOM 2945 N TYR 440	64.603	45.917	-1.548	1.00	36.02	CI	ATOM 2988 N HIS 444	58.649	45.260	-9.911	1.00	35.65	CI
ATOM 2946 H TYR 440	63.751	46.319	-1.822	1.00	0.00	CI	ATOM 2989 H HIS 444	59.147	44.445	-9.659	1.00	0.00	CI
ATOM 2947 CA TYR 440	65.057	44.691	-2.198	1.00	34.28	CI	ATOM 2990 CA HIS 444	57.662	45.172	-10.975	1.00	37.75	CI
ATOM 2948 CB TYR 440	64.175	43.480	-1.878	1.00	33.99	CI	ATOM 2991 CB HIS 444	58.329	45.224	-12.330	1.00	37.09	CI
ATOM 2949 CG TYR 440	64.016	43.240	-0.397	1.00	34.14	CI	ATOM 2992 CG HIS 444	59.149	46.476	-12.560	1.00	41.36	CI
ATOM 2950 CD1 TYR 440	62.773	43.230	0.169	1.00	35.16	CI	ATOM 2993 CD2 HIS 444	60.434	46.664	-12.075	1.00	41.40	CI
ATOM 2951 CE1 TYR 440	62.625	43.037	1.532	1.00	36.66	CI	ATOM 2994 ND1 HIS 444	58.811	47.563	-13.261	1.00	41.74	CI
ATOM 2952 CD2 TYR 440	65.126	43.064	0.385	1.00	37.83	CI	ATOM 2995 HD1 HIS 444	57.892	47.890	-13.410	1.00	0.00	CI
ATOM 2953 CE2 TYR 440	64.992	42.881	1.752	1.00	39.02	CI	ATOM 2996 CE1 HIS 444	59.850	48.372	-13.217	1.00	42.00	CI
ATOM 2954 CZ TYR 440	63.741	42.864	2.317	1.00	37.34	CI	ATOM 2997 NE2 HIS 444	60.817	47.832	-12.502	1.00	41.38	CI
ATOM 2955 OH TYR 440	63.637	42.649	3.678	1.00	37.56	CI	ATOM 2998 HE2 HIS 444	61.690	48.248	-12.334	1.00	0.00	CI
ATOM 2956 HH TYR 440	64.498	42.343	3.988	1.00	0.00	CI	ATOM 2999 C HIS 444	56.889	43.871	-10.878	1.00	40.10	CI
ATOM 2957 C TYR 440	65.088	44.768	-3.681	1.00	34.07	CI	ATOM 3000 N HIS 444	57.461	42.867	-11.309	1.00	40.15	CI
ATOM 2958 O TYR 440	65.598	43.823	-4.267	1.00	35.54	CI	ATOM 3001 N PRO 445	55.615	43.752	-10.406	1.00	42.06	CI
ATOM 2959 N LYS 441	64.627	45.833	-4.330	1.00	33.18	CI	ATOM 3002 CD PRO 445	54.738	44.836	-9.937	1.00	41.56	CI
ATOM 2960 H LYS 441	64.345	46.623	-3.822	1.00	0.00	CI	ATOM 3003 CA PRO 445	54.913	42.497	-10.276	1.00	40.90	CI
ATOM 2961 CA LYS 441	64.595	45.957	-5.763	1.00	30.44	CI	ATOM 3004 CB PRO 445	53.569	42.882	-9.730	1.00	39.35	CI
ATOM 2962 CB LYS 441	65.983	45.759	-6.364	1.00	33.76	CI	ATOM 3005 CG PRO 445	53.364	44.274	-10.215	1.00	39.35	CI
ATOM 2963 CG LYS 441	66.729	47.080	-6.407	1.00	39.59	CI	ATOM 3006 C PRO 445	54.868	41.782	-11.600	1.00	42.18	CI
ATOM 2964 CD LYS 441	67.273	47.497	-5.045	1.00	47.69	CI	ATOM 3007 O PRO 445	54.769	40.571	-11.569	1.00	45.69	CI
ATOM 2965 CE LYS 441	67.503	49.028	-4.984	1.00	53.37	CI	ATOM 3008 N GLU 446	55.082	42.380	-12.769	1.00	41.64	CI
ATOM 2966 NZ LYS 441	66.267	49.780	-5.240	1.00	57.64	CI	ATOM 3009 H GLU 446	55.320	43.320	-12.761	1.00	0.00	CI

FIG. 5JJ

ATOM 3010	CA	GLU	446	55.025	41.656	-14.029	1.00	42.05	CI	ATOM 3053	O	LEU	450	54.297	31.406	-12.266	1.00	55.62	CI
ATOM 3011	CB	GLU	446	54.967	42.639	-15.183	1.00	47.06	CI	ATOM 3054	N	LEU	451	55.685	33.097	-11.575	1.00	55.46	CI
ATOM 3012	CG	GLU	446	54.109	43.925	-14.992	1.00	56.71	CI	ATOM 3055	H	LEU	451	56.073	33.954	-11.849	1.00	0.00	CI
ATOM 3013	CD	GLU	446	54.728	45.083	-14.162	1.00	62.28	CI	ATOM 3056	CA	LEU	451	55.998	32.654	-10.223	1.00	56.01	CI
ATOM 3014	OE1	GLU	446	54.100	45.472	-13.178	1.00	66.26	CI	ATOM 3057	CB	LEU	451	57.137	33.542	-9.731	1.00	55.80	CI
ATOM 3015	OE2	GLU	446	55.818	45.604	-14.473	1.00	65.55	CI	ATOM 3058	CG	LEU	451	57.745	33.278	-8.394	1.00	56.96	CI
ATOM 3016	C	GLU	446	56.237	40.722	-14.197	1.00	40.44	CI	ATOM 3059	CD1	LEU	451	58.833	32.284	-8.653	1.00	59.12	CI
ATOM 3017	O	GLU	446	56.186	39.708	-14.904	1.00	41.66	CI	ATOM 3060	CD2	LEU	451	58.369	34.511	-7.751	1.00	58.27	CI
ATOM 3018	N	GLU	447	57.360	40.995	-13.538	1.00	37.89	CI	ATOM 3061	C	LEU	451	54.785	32.700	-9.280	1.00	55.96	CI
ATOM 3019	H	GLU	447	57.394	41.809	-12.999	1.00	0.00	CI	ATOM 3062	O	LEU	451	54.717	31.935	-8.319	1.00	53.74	CI
ATOM 3020	CA	GLU	447	58.519	40.096	-13.509	1.00	36.73	CI	ATOM 3063	N	GLY	452	53.774	33.533	-9.522	1.00	57.52	CI
ATOM 3021	CB	GLU	447	59.750	40.810	-12.976	1.00	34.60	CI	ATOM 3064	H	GLY	452	53.889	34.241	-10.191	1.00	0.00	CI
ATOM 3022	CG	GLU	447	60.320	41.883	-13.850	1.00	35.27	CI	ATOM 3065	CA	GLY	452	52.567	33.515	-8.710	1.00	60.66	CI
ATOM 3023	CD	GLU	447	61.450	42.699	-13.197	1.00	36.14	CI	ATOM 3066	C	GLY	452	51.942	32.137	-8.772	1.00	63.64	CI
ATOM 3024	OE1	GLU	447	62.240	43.286	-13.939	1.00	37.31	CI	ATOM 3067	O	GLY	452	51.476	31.593	-7.782	1.00	62.60	CI
ATOM 3025	OE2	GLU	447	61.541	42.782	-11.970	1.00	32.80	CI	ATOM 3068	N	HIS	453	52.089	31.545	-9.969	1.00	68.46	CI
ATOM 3026	C	GLU	447	58.311	38.850	-12.599	1.00	36.31	CI	ATOM 3069	H	HIS	453	52.628	32.040	-10.618	1.00	0.00	CI
ATOM 3027	O	GLU	447	59.113	37.911	-12.592	1.00	36.33	CI	ATOM 3070	CA	HIS	453	51.606	30.205	-10.326	1.00	72.27	CI
ATOM 3028	N	LEU	448	57.273	38.763	-11.769	1.00	33.81	CI	ATOM 3071	CB	HIS	453	51.785	29.908	-11.828	1.00	73.84	CI
ATOM 3029	H	LEU	448	56.554	39.431	-11.802	1.00	0.00	CI	ATOM 3072	CG	HIS	453	51.421	31.061	-12.777	1.00	77.81	CI
ATOM 3030	CA	LEU	448	57.145	37.691	-10.839	1.00	31.88	CI	ATOM 3073	CD2	HIS	453	50.599	32.148	-12.498	1.00	79.29	CI
ATOM 3031	CB	LEU	448	57.080	38.299	-9.484	1.00	29.29	CI	ATOM 3074	ND1	HIS	453	51.886	31.244	-14.012	1.00	79.84	CI
ATOM 3032	CG	LEU	448	58.008	39.432	-9.140	1.00	29.81	CI	ATOM 3075	HD1	HIS	453	52.617	30.739	-14.425	1.00	0.00	CI
ATOM 3033	CD1	LEU	448	57.907	39.863	-7.684	1.00	26.02	CI	ATOM 3076	CE1	HIS	453	51.385	32.382	-14.470	1.00	81.11	CI
ATOM 3034	CD2	LEU	448	59.396	38.931	-9.392	1.00	31.13	CI	ATOM 3077	NE2	HIS	453	50.613	32.923	-13.551	1.00	79.85	CI
ATOM 3035	C	LEU	448	55.863	36.977	-11.165	1.00	33.75	CI	ATOM 3078	HE2	HIS	453	50.230	33.825	-13.586	1.00	0.00	CI
ATOM 3036	O	LEU	448	55.436	36.145	-10.382	1.00	33.96	CI	ATOM 3079	C	HIS	453	52.454	29.235	-9.515	1.00	73.43	CI
ATOM 3037	N	VAL	449	55.166	37.233	-12.263	1.00	36.99	CI	ATOM 3080	O	HIS	453	51.875	28.531	-8.692	1.00	73.56	CI
ATOM 3038	H	VAL	449	55.580	37.800	-12.942	1.00	0.00	CI	ATOM 3081	N	SER	454	53.785	29.207	-9.651	1.00	74.64	CI
ATOM 3039	CA	VAL	449	53.819	36.701	-12.472	1.00	41.46	CI	ATOM 3082	H	SER	454	54.214	29.739	-10.351	1.00	0.00	CI
ATOM 3040	CB	VAL	449	53.157	37.546	-13.625	1.00	41.56	CI	ATOM 3083	CA	SER	454	54.639	28.411	-8.765	1.00	77.07	CI
ATOM 3041	CG1	VAL	449	54.002	37.614	-14.880	1.00	42.22	CI	ATOM 3084	CB	SER	454	56.123	28.762	-8.980	1.00	77.34	CI
ATOM 3042	CG2	VAL	449	51.921	36.858	-14.112	1.00	42.01	CI	ATOM 3085	OG	SER	454	57.095	27.715	-9.124	1.00	75.28	CI
ATOM 3043	C	VAL	449	53.760	35.192	-12.733	1.00	44.81	CI	ATOM 3086	HG	SER	454	57.149	27.211	-8.306	1.00	0.00	CI
ATOM 3044	O	VAL	449	52.866	34.469	-12.227	1.00	44.54	CI	ATOM 3087	C	SER	454	54.332	28.608	-7.262	1.00	78.84	CI
ATOM 3045	N	LEU	450	54.716	34.669	-13.515	1.00	47.21	CI	ATOM 3088	O	SER	454	54.270	27.617	-6.535	1.00	80.57	CI
ATOM 3046	H	LEU	450	55.416	35.260	-13.870	1.00	0.00	CI	ATOM 3089	N	LEU	455	54.070	29.789	-6.693	1.00	79.72	CI
ATOM 3047	CA	LEU	450	54.771	33.243	-13.781	1.00	50.57	CI	ATOM 3090	H	LEU	455	53.956	30.582	-7.250	1.00	0.00	CI
ATOM 3048	CB	LEU	450	55.942	32.894	-14.628	1.00	50.75	CI	ATOM 3091	CA	LEU	455	53.849	29.915	-5.257	1.00	80.43	CI
ATOM 3049	CG	LEU	450	56.148	33.488	-15.994	1.00	52.39	CI	ATOM 3092	CB	LEU	455	54.085	31.347	-4.838	1.00	80.20	CI
ATOM 3050	CD1	LEU	450	57.152	32.586	-16.673	1.00	53.05	CI	ATOM 3093	CG	LEU	455	55.389	31.981	-5.269	1.00	81.67	CI
ATOM 3051	CD2	LEU	450	54.882	33.534	-16.833	1.00	54.10	CI	ATOM 3094	CD1	LEU	455	55.254	33.494	-5.419	1.00	81.36	CI
ATOM 3052	C	LEU	450	54.911	32.468	-12.471	1.00	53.83	CI	ATOM 3095	CD2	LEU	455	56.431	31.579	-4.264	1.00	82.26	CI

FIG. 5KK

ATOM 3096 C LEU 455	52.438	29.510	-4.848	1.00	81.56	CI	ATOM 3139 C ALA 460	39.237	36.784	-6.588	1.00	76.29	CI
ATOM 3097 O LEU 455	52.038	29.893	-3.741	1.00	82.22	CI	ATOM 3140 O ALA 460	39.449	37.976	-6.833	1.00	76.98	CI
ATOM 3098 N GLY 456	51.653	28.816	-5.708	1.00	81.89	CI	ATOM 3141 N PRO 461	38.217	36.147	-7.187	1.00	76.26	CI
ATOM 3099 H GLY 456	52.026	28.592	-6.584	1.00	0.00	CI	ATOM 3142 CD PRO 461	38.104	34.684	-7.245	1.00	75.88	CI
ATOM 3100 CA GLY 456	50.269	28.361	-5.467	1.00	82.22	CI	ATOM 3143 CA PRO 461	37.242	36.793	-8.068	1.00	75.46	CI
ATOM 3101 C GLY 456	49.220	29.386	-4.973	1.00	82.56	CI	ATOM 3144 CB PRO 461	36.605	35.605	-8.755	1.00	75.71	CI
ATOM 3102 O GLY 456	48.268	28.989	-4.276	1.00	82.38	CI	ATOM 3145 CG PRO 461	36.703	34.458	-7.767	1.00	75.60	CI
ATOM 3103 N ILE 457	49.342	30.697	-5.286	1.00	82.54	CI	ATOM 3146 C PRO 461	36.221	37.803	-7.545	1.00	75.72	CI
ATOM 3104 H ILE 457	50.075	30.942	-5.894	1.00	0.00	CI	ATOM 3147 O PRO 461	35.677	37.734	-6.440	1.00	73.66	CI
ATOM 3105 CA ILE 457	48.435	31.761	-4.824	1.00	81.63	CI	ATOM 3148 N LEU 462	35.996	38.767	-8.449	1.00	77.19	CI
ATOM 3106 CB ILE 457	49.110	33.157	-5.086	1.00	80.69	CI	ATOM 3149 H LEU 462	36.516	38.723	-9.277	1.00	0.00	CI
ATOM 3107 CG ILE 457	48.218	34.305	-4.662	1.00	79.76	CI	ATOM 3150 CA LEU 462	35.069	39.891	-8.275	1.00	78.87	CI
ATOM 3108 CG ILE 457	50.369	33.275	-4.253	1.00	79.82	CI	ATOM 3151 CB LEU 462	35.674	40.984	-7.360	1.00	78.32	CI
ATOM 3109 CD ILE 457	51.506	33.868	-5.081	1.00	77.89	CI	ATOM 3152 CG LEU 462	34.786	41.959	-6.558	1.00	78.09	CI
ATOM 3110 C ILE 457	47.048	31.698	-5.472	1.00	81.70	CI	ATOM 3153 CD LEU 462	34.051	42.987	-7.406	1.00	78.32	CI
ATOM 3111 O ILE 457	46.903	31.761	-6.700	1.00	82.57	CI	ATOM 3154 CD2 LEU 462	33.767	41.092	-5.828	1.00	78.62	CI
ATOM 3112 N PRO 458	45.963	31.583	-4.705	1.00	81.40	CI	ATOM 3155 C LEU 462	34.701	40.565	-9.611	1.00	80.63	CI
ATOM 3113 CD PRO 458	45.959	31.225	-3.278	1.00	81.21	CI	ATOM 3156 OTI LEU 462	33.507	40.842	-9.808	1.00	81.74	CI
ATOM 3114 CA PRO 458	44.607	31.643	-5.264	1.00	80.74	CI	ATOM 3157 OT2 LEU 462	35.606	40.847	-10.417	1.00	81.39	CI
ATOM 3115 CB PRO 458	43.779	30.942	-4.157	1.00	81.12	CI	ATOM 3158 CB LEU 472	22.074	42.654	-1.426	1.00	62.24	C2
ATOM 3116 CG PRO 458	44.757	30.293	-3.173	1.00	80.47	CI	ATOM 3159 CG LEU 472	22.278	44.145	-1.189	1.00	59.98	C2
ATOM 3117 C PRO 458	44.120	33.063	-5.648	1.00	79.70	CI	ATOM 3160 CD1 LEU 472	23.496	44.325	-0.328	1.00	59.13	C2
ATOM 3118 O PRO 458	43.674	33.736	-4.718	1.00	80.10	CI	ATOM 3161 CD2 LEU 472	22.501	44.883	-2.486	1.00	56.85	C2
ATOM 3119 N TRP 459	44.171	33.662	-6.861	1.00	78.19	CI	ATOM 3162 C LEU 472	23.504	40.625	-1.996	1.00	63.91	C2
ATOM 3120 H TRP 459	44.614	33.185	-7.591	1.00	0.00	CI	ATOM 3163 O LEU 472	23.738	39.874	-2.949	1.00	64.90	C2
ATOM 3121 CA TRP 459	43.543	34.986	-7.092	1.00	77.73	CI	ATOM 3164 HT1 LEU 472	21.563	41.441	-3.595	1.00	0.00	C2
ATOM 3122 CB TRP 459	43.802	35.428	-8.522	1.00	78.71	CI	ATOM 3165 HT2 LEU 472	23.091	41.291	-4.237	1.00	0.00	C2
ATOM 3123 CG TRP 459	43.054	36.677	-9.017	1.00	81.37	CI	ATOM 3166 N LEU 472	22.472	41.930	-3.693	1.00	64.29	C2
ATOM 3124 CD2 TRP 459	41.802	36.771	-9.618	1.00	82.89	CI	ATOM 3167 HT3 LEU 472	22.358	42.849	-4.160	1.00	0.00	C2
ATOM 3125 CE2 TRP 459	41.717	38.139	-9.883	1.00	84.21	CI	ATOM 3168 CA LEU 472	23.092	42.037	-2.386	1.00	63.85	C2
ATOM 3126 CE3 TRP 459	40.738	35.960	-9.983	1.00	84.28	CI	ATOM 3169 N ALA 473	23.652	40.229	-0.733	1.00	63.02	C2
ATOM 3127 CD1 TRP 459	43.661	37.899	-8.925	1.00	83.89	CI	ATOM 3170 H ALA 473	23.533	40.867	0.002	1.00	0.00	C2
ATOM 3128 NE1 TRP 459	42.828	38.765	-9.460	1.00	85.23	CI	ATOM 3171 CA ALA 473	24.023	38.881	-0.353	1.00	62.37	C2
ATOM 3129 HE1 TRP 459	42.944	39.738	-9.483	1.00	0.00	CI	ATOM 3172 CB ALA 473	22.870	37.939	-0.558	1.00	63.65	C2
ATOM 3130 CZ2 TRP 459	40.615	38.727	-10.494	1.00	84.17	CI	ATOM 3173 C ALA 473	25.196	38.354	-1.126	1.00	62.01	C2
ATOM 3131 CZ3 TRP 459	39.630	36.538	-10.597	1.00	84.56	CI	ATOM 3174 O ALA 473	26.301	38.651	-0.715	1.00	63.36	C2
ATOM 3132 CH2 TRP 459	39.562	37.904	-10.852	1.00	84.83	CI	ATOM 3175 N GLY 474	25.032	37.784	-2.306	1.00	61.43	C2
ATOM 3133 C TRP 459	42.009	35.013	-6.827	1.00	77.31	CI	ATOM 3176 H GLY 474	24.148	37.818	-2.722	1.00	0.00	C2
ATOM 3134 O TRP 459	41.202	34.244	-7.376	1.00	76.38	CI	ATOM 3177 CA GLY 474	26.101	37.137	-3.047	1.00	63.80	C2
ATOM 3135 N ALA 460	41.557	35.969	-6.020	1.00	76.81	CI	ATOM 3178 C GLY 474	27.354	37.950	-3.356	1.00	65.13	C2
ATOM 3136 H ALA 460	42.187	36.640	-5.689	1.00	0.00	CI	ATOM 3179 O GLY 474	28.482	37.417	-3.257	1.00	66.24	C2
ATOM 3137 CA ALA 460	40.158	36.044	-5.613	1.00	76.44	CI	ATOM 3180 N CYS 475	27.175	39.237	-3.757	1.00	64.88	C2
ATOM 3138 CB ALA 460	40.072	36.724	-4.243	1.00	75.51	CI	ATOM 3181 H CYS 475	26.261	39.550	-3.885	1.00	0.00	C2

FIG. 5LL

ATOM 3182	CA	CYS	475	28.308	40.127	-4.068	1.00	61.84	ATOM 3225	N	HIS	480	33.609	39.766	0.950	1.00	39.56	C2
ATOM 3183	CB	CYS	475	27.925	41.413	-4.806	1.00	63.74	ATOM 3226	H	HIS	480	32.658	39.935	0.763	1.00	0.00	C2
ATOM 3184	SG	CYS	475	29.494	42.075	-5.437	1.00	68.86	ATOM 3227	CA	HIS	480	33.979	39.108	2.179	1.00	37.81	C2
ATOM 3185	C	CYS	475	28.995	40.567	-2.795	1.00	57.30	ATOM 3228	CB	HIS	480	32.742	38.714	2.922	1.00	34.29	C2
ATOM 3186	O	CYS	475	30.214	40.449	-2.724	1.00	57.14	ATOM 3229	CG	HIS	480	33.094	38.241	4.309	1.00	33.82	C2
ATOM 3187	N	LEU	476	28.230	40.983	-1.779	1.00	53.29	ATOM 3230	CD2	HIS	480	33.123	36.932	4.709	1.00	33.44	C2
ATOM 3188	H	LEU	476	27.264	41.024	-1.885	1.00	0.00	ATOM 3231	ND1	HIS	480	33.450	38.995	5.344	1.00	34.27	C2
ATOM 3189	CA	LEU	476	28.797	41.315	-0.493	1.00	50.43	ATOM 3232	CD1	HIS	480	33.505	39.976	5.362	1.00	0.00	C2
ATOM 3190	CB	LEU	476	27.719	41.723	0.523	1.00	45.68	ATOM 3233	CEI	HIS	480	33.706	38.223	6.365	1.00	33.80	C2
ATOM 3191	CG	LEU	476	27.130	43.165	0.497	1.00	42.80	ATOM 3234	NE2	HIS	480	33.504	36.986	5.965	1.00	37.12	C2
ATOM 3192	CD1	LEU	476	26.670	43.559	1.896	1.00	36.25	ATOM 3235	HE2	HIS	480	33.637	36.202	6.544	1.00	0.00	C2
ATOM 3193	CD2	LEU	476	28.180	44.180	0.057	1.00	40.22	ATOM 3236	C	HIS	480	34.836	37.860	1.961	1.00	39.08	C2
ATOM 3194	C	LEU	476	29.546	40.108	0.042	1.00	50.42	ATOM 3237	O	HIS	480	35.716	37.631	2.791	1.00	40.93	C2
ATOM 3195	O	LEU	476	30.614	40.222	0.646	1.00	50.61	ATOM 3238	N	SER	481	34.615	37.029	0.935	1.00	39.24	C2
ATOM 3196	N	SER	477	29.053	38.922	-0.270	1.00	50.62	ATOM 3239	H	SER	481	33.900	37.241	0.305	1.00	0.00	C2
ATOM 3197	H	SER	477	28.196	38.860	-0.729	1.00	0.00	ATOM 3240	CA	SER	481	35.391	35.818	0.683	1.00	38.17	C2
ATOM 3198	CA	SER	477	29.721	37.712	0.125	1.00	51.41	ATOM 3241	CB	SER	481	34.813	34.943	-0.420	1.00	40.42	C2
ATOM 3199	CB	SER	477	28.778	36.524	-0.051	1.00	53.45	ATOM 3242	OG	SER	481	33.454	34.597	-0.137	1.00	47.61	C2
ATOM 3200	OG	SER	477	27.732	36.616	0.926	1.00	57.65	ATOM 3243	HG	SER	481	32.898	35.385	-0.162	1.00	0.00	C2
ATOM 3201	HG	SER	477	27.280	37.462	0.828	1.00	0.00	ATOM 3244	C	SER	481	36.724	36.272	0.211	1.00	36.12	C2
ATOM 3202	C	SER	477	30.978	37.525	-0.681	1.00	50.75	ATOM 3245	O	SER	481	37.692	35.793	0.765	1.00	36.23	C2
ATOM 3203	O	SER	477	31.980	37.143	-0.068	1.00	51.41	ATOM 3246	N	GLY	482	36.786	37.206	-0.744	1.00	36.21	C2
ATOM 3204	N	GLN	478	31.037	37.788	-1.984	1.00	50.21	ATOM 3247	H	GLY	482	35.956	37.498	-1.168	1.00	0.00	C2
ATOM 3205	H	GLN	478	30.222	38.056	-2.457	1.00	0.00	ATOM 3248	CA	GLY	482	38.028	37.792	-1.266	1.00	36.50	C2
ATOM 3206	CA	GLN	478	32.307	37.697	-2.715	1.00	51.37	ATOM 3249	C	GLY	482	38.958	38.296	-0.151	1.00	36.14	C2
ATOM 3207	CB	GLN	478	32.064	37.929	-4.166	1.00	53.65	ATOM 3250	O	GLY	482	40.142	37.936	-0.055	1.00	36.65	C2
ATOM 3208	CG	GLN	478	31.983	36.570	-4.788	1.00	57.32	ATOM 3251	N	LEU	483	38.381	39.084	0.750	1.00	34.04	C2
ATOM 3209	CD	GLN	478	31.354	36.649	-6.160	1.00	60.47	ATOM 3252	H	LEU	483	37.445	39.326	0.608	1.00	0.00	C2
ATOM 3210	OE1	GLN	478	31.999	36.504	-7.205	1.00	62.26	ATOM 3253	CA	LEU	483	39.073	39.593	1.900	1.00	32.07	C2
ATOM 3211	NE2	GLN	478	30.045	36.878	-6.167	1.00	62.16	ATOM 3254	CB	LEU	483	38.134	40.442	2.731	1.00	31.17	C2
ATOM 3212	HE21	GLN	478	29.569	36.972	-5.317	1.00	0.00	ATOM 3255	CG	LEU	483	37.535	41.687	2.081	1.00	31.11	C2
ATOM 3213	HE22	GLN	478	29.641	36.928	-7.054	1.00	0.00	ATOM 3256	CD1	LEU	483	36.757	42.411	3.156	1.00	30.82	C2
ATOM 3214	C	GLN	478	33.398	38.670	-2.249	1.00	50.66	ATOM 3257	CD2	LEU	483	38.599	42.593	1.480	1.00	29.50	C2
ATOM 3215	O	GLN	478	34.584	38.314	-2.217	1.00	50.13	ATOM 3258	C	LEU	483	39.600	38.461	2.745	1.00	32.91	C2
ATOM 3216	N	LEU	479	33.045	39.909	-1.859	1.00	48.78	ATOM 3259	O	LEU	483	40.752	38.498	3.199	1.00	31.25	C2
ATOM 3217	H	LEU	479	32.131	40.223	-2.039	1.00	0.00	ATOM 3260	N	PHE	484	38.767	37.422	2.925	1.00	34.08	C2
ATOM 3218	CA	LEU	479	34.015	40.800	-1.235	1.00	45.87	ATOM 3261	H	PHE	484	37.900	37.408	2.471	1.00	0.00	C2
ATOM 3219	CB	LEU	479	33.434	42.141	-0.827	1.00	47.03	ATOM 3262	CA	PHE	484	39.105	36.298	3.788	1.00	34.60	C2
ATOM 3220	CG	LEU	479	32.853	43.083	-1.818	1.00	49.40	ATOM 3263	CB	PHE	484	37.975	35.300	3.925	1.00	37.46	C2
ATOM 3221	CD1	LEU	479	32.596	44.393	-1.078	1.00	48.15	ATOM 3264	CG	PHE	484	38.268	34.183	4.897	1.00	40.86	C2
ATOM 3222	CD2	LEU	479	33.779	43.258	-3.000	1.00	48.59	ATOM 3265	CD1	PHE	484	38.219	32.884	4.482	1.00	45.62	C2
ATOM 3223	C	LEU	479	34.505	40.146	0.056	1.00	42.13	ATOM 3266	CD2	PHE	484	38.528	34.445	6.210	1.00	43.62	C2
ATOM 3224	O	LEU	479	35.695	39.955	0.262	1.00	40.90	ATOM 3267	CE1	PHE	484	38.421	31.858	5.395	1.00	47.98	C2

FIG. 5MM

ATOM 3268	CE2 PHE 484	38.731	33.427	7.119	1.00	46.78	C2	ATOM 3311	O GLY 488	47.660	33.946	4.712	1.00	25.86	C2
ATOM 3269	CZ PHE 484	38.677	32.119	6.720	1.00	48.06	C2	ATOM 3312	N LEU 489	46.655	34.798	2.818	1.00	25.05	C2
ATOM 3270	C PHE 484	40.245	35.602	3.113	1.00	33.92	C2	ATOM 3313	H LEU 489	45.798	35.062	2.416	1.00	0.00	C2
ATOM 3271	O PHE 484	41.162	35.289	3.826	1.00	34.25	C2	ATOM 3314	CA LEU 489	47.911	34.990	2.099	1.00	25.63	C2
ATOM 3272	N LEU 485	40.326	35.413	1.799	1.00	32.75	C2	ATOM 3315	CB LEU 489	47.708	35.570	0.725	1.00	27.66	C2
ATOM 3273	H LEU 485	39.577	35.717	1.250	1.00	0.00	C2	ATOM 3316	CG LEU 489	46.761	34.755	-0.189	1.00	30.83	C2
ATOM 3274	CA LEU 485	41.475	34.778	1.163	1.00	33.74	C2	ATOM 3317	CD1 LEU 489	46.373	35.506	-1.471	1.00	30.43	C2
ATOM 3275	CB LEU 485	41.183	34.629	-0.305	1.00	35.35	C2	ATOM 3318	CD2 LEU 489	47.472	33.454	-0.502	1.00	32.62	C2
ATOM 3276	CG LEU 485	42.101	33.962	-1.275	1.00	37.80	C2	ATOM 3319	C LEU 489	48.783	35.936	2.853	1.00	25.28	C2
ATOM 3277	CD1 LEU 485	41.181	33.404	-2.345	1.00	41.44	C2	ATOM 3320	O LEU 489	49.973	35.705	2.914	1.00	27.37	C2
ATOM 3278	CD2 LEU 485	43.125	34.903	-1.899	1.00	40.07	C2	ATOM 3321	N LEU 490	48.237	36.935	3.534	1.00	25.79	C2
ATOM 3279	C LEU 485	42.740	35.585	1.376	1.00	33.95	C2	ATOM 3322	H LEU 490	47.267	37.079	3.515	1.00	0.00	C2
ATOM 3280	O LEU 485	43.766	35.060	1.850	1.00	33.84	C2	ATOM 3323	CA LEU 490	49.072	37.868	4.220	1.00	25.96	C2
ATOM 3281	N TYR 486	42.609	36.885	1.034	1.00	33.67	C2	ATOM 3324	CB LEU 490	48.274	39.139	4.567	1.00	27.96	C2
ATOM 3282	H TYR 486	41.757	37.186	0.659	1.00	0.00	C2	ATOM 3325	CG LEU 490	47.823	40.131	3.474	1.00	27.89	C2
ATOM 3283	CA TYR 486	43.662	37.862	1.242	1.00	31.33	C2	ATOM 3326	CD1 LEU 490	46.772	41.019	4.123	1.00	28.03	C2
ATOM 3284	CB TYR 486	43.210	39.290	0.714	1.00	35.33	C2	ATOM 3327	CD2 LEU 490	48.988	40.942	2.899	1.00	28.15	C2
ATOM 3285	CG TYR 486	43.300	39.325	-0.825	1.00	33.37	C2	ATOM 3328	C LEU 490	49.619	37.243	5.459	1.00	27.33	C2
ATOM 3286	CD1 TYR 486	42.154	39.405	-1.579	1.00	32.79	C2	ATOM 3329	O LEU 490	50.740	37.528	5.865	1.00	26.73	C2
ATOM 3287	CE1 TYR 486	42.228	39.290	-2.944	1.00	33.73	C2	ATOM 3330	N GLN 491	48.883	36.370	6.111	1.00	29.88	C2
ATOM 3288	CD2 TYR 486	44.533	39.153	-1.445	1.00	34.59	C2	ATOM 3331	H GLN 491	47.984	36.127	5.799	1.00	0.00	C2
ATOM 3289	CE2 TYR 486	44.618	39.033	-2.818	1.00	34.63	C2	ATOM 3332	CA GLN 491	49.430	35.809	7.314	1.00	33.01	C2
ATOM 3290	CZ TYR 486	43.451	39.096	-3.562	1.00	35.58	C2	ATOM 3333	CB GLN 491	48.305	35.113	8.027	1.00	38.68	C2
ATOM 3291	OH TYR 486	43.484	38.880	-4.942	1.00	38.24	C2	ATOM 3334	CG GLN 491	47.856	35.963	9.197	1.00	46.07	C2
ATOM 3292	HH TYR 486	42.614	39.086	-5.306	1.00	0.00	C2	ATOM 3335	CD GLN 491	46.348	36.262	9.278	1.00	50.83	C2
ATOM 3293	C TYR 486	44.068	37.905	2.697	1.00	27.39	C2	ATOM 3336	OEI GLN 491	45.965	37.436	9.402	1.00	51.92	C2
ATOM 3294	O TYR 486	45.258	38.007	2.942	1.00	26.06	C2	ATOM 3337	NE2 GLN 491	45.425	35.294	9.278	1.00	51.67	C2
ATOM 3295	N GLN 487	43.270	37.691	3.708	1.00	26.95	C2	ATOM 3338	HE21 GLN 491	45.723	34.353	9.288	1.00	0.00	C2
ATOM 3296	H GLN 487	42.315	37.545	3.565	1.00	0.00	C2	ATOM 3339	HE22 GLN 491	44.489	35.560	9.286	1.00	0.00	C2
ATOM 3297	CA GLN 487	43.835	37.646	5.031	1.00	28.33	C2	ATOM 3340	C GLN 491	50.582	34.867	6.986	1.00	33.58	C2
ATOM 3298	CB GLN 487	42.690	37.578	6.050	1.00	32.66	C2	ATOM 3341	O GLN 491	51.582	34.828	7.715	1.00	34.65	C2
ATOM 3299	CG GLN 487	43.092	37.979	7.485	1.00	37.50	C2	ATOM 3342	N ALA 492	50.482	34.191	5.824	1.00	34.15	C2
ATOM 3300	CD GLN 487	43.966	39.252	7.469	1.00	40.54	C2	ATOM 3343	H ALA 492	49.701	34.382	5.264	1.00	0.00	C2
ATOM 3301	OEI GLN 487	43.441	40.346	7.292	1.00	40.45	C2	ATOM 3344	CA ALA 492	51.416	33.177	5.321	1.00	33.64	C2
ATOM 3302	NE2 GLN 487	45.305	39.206	7.549	1.00	38.19	C2	ATOM 3345	CB ALA 492	50.818	32.500	4.081	1.00	31.67	C2
ATOM 3303	HE21 GLN 487	45.755	40.057	7.452	1.00	0.00	C2	ATOM 3346	C ALA 492	52.802	33.678	4.959	1.00	34.79	C2
ATOM 3304	HE22 GLN 487	45.736	38.340	7.702	1.00	0.00	C2	ATOM 3347	O ALA 492	53.789	32.943	4.879	1.00	36.03	C2
ATOM 3305	C GLN 487	44.791	36.455	5.207	1.00	28.53	C2	ATOM 3348	N LEU 493	52.885	34.981	4.728	1.00	35.94	C2
ATOM 3306	O GLN 487	45.774	36.542	5.964	1.00	28.72	C2	ATOM 3349	H LEU 493	52.060	35.510	4.721	1.00	0.00	C2
ATOM 3307	N GLY 488	44.550	35.363	4.454	1.00	28.32	C2	ATOM 3350	CA LEU 493	54.139	35.634	4.426	1.00	34.86	C2
ATOM 3308	H GLY 488	43.799	35.400	3.824	1.00	0.00	C2	ATOM 3351	CB LEU 493	53.898	36.990	3.747	1.00	31.36	C2
ATOM 3309	CA GLY 488	45.291	34.120	4.557	1.00	26.04	C2	ATOM 3352	CG LEU 493	53.127	37.065	2.443	1.00	28.27	C2
ATOM 3310	C GLY 488	46.660	34.264	4.033	1.00	25.75	C2	ATOM 3353	CD1 LEU 493	52.715	38.495	2.214	1.00	31.74	C2

FIG. 5NN

ATOM 3354 CD2 LEU 493	53.977	36.608	1.285	1.00	28.79	C2	ATOM 3397 H GLU 499	62.362	43.716	8.081	1.00	0.00	C2
ATOM 3355 C LEU 493	54.879	35.843	5.721	1.00	36.15	C2	ATOM 3398 CA GLU 499	61.731	45.699	8.391	1.00	48.06	C2
ATOM 3356 O LEU 493	55.985	36.374	5.694	1.00	36.70	C2	ATOM 3399 CB GLU 499	62.498	46.193	7.155	1.00	52.19	C2
ATOM 3357 N GLU 494	54.300	35.497	6.855	1.00	38.35	C2	ATOM 3400 CG GLU 499	64.001	46.187	7.100	1.00	57.51	C2
ATOM 3358 H GLU 494	53.395	35.130	6.836	1.00	0.00	C2	ATOM 3401 CD GLU 499	64.544	44.777	7.076	1.00	60.61	C2
ATOM 3359 CA GLU 494	54.910	35.648	8.157	1.00	43.14	C2	ATOM 3402 OE1 GLU 499	64.755	44.231	8.162	1.00	62.96	C2
ATOM 3360 CB GLU 494	55.621	34.340	8.545	1.00	46.61	C2	ATOM 3403 OE2 GLU 499	64.739	44.234	5.984	1.00	62.79	C2
ATOM 3361 CG GLU 494	54.711	33.471	9.419	1.00	53.71	C2	ATOM 3404 C GLU 499	60.269	45.896	7.981	1.00	46.94	C2
ATOM 3362 CD GLU 494	54.195	32.160	8.785	1.00	60.27	C2	ATOM 3405 O GLU 499	59.600	46.895	8.272	1.00	48.15	C2
ATOM 3363 OE1 GLU 494	53.146	31.653	9.230	1.00	63.52	C2	ATOM 3406 N LEU 500	59.806	44.934	7.193	1.00	44.38	C2
ATOM 3364 OE2 GLU 494	54.839	31.630	7.862	1.00	62.76	C2	ATOM 3407 H LEU 500	60.351	44.137	7.027	1.00	0.00	C2
ATOM 3365 C GLU 494	55.865	36.825	8.343	1.00	44.32	C2	ATOM 3408 CA LEU 500	58.491	44.997	6.651	1.00	41.08	C2
ATOM 3366 O GLU 494	57.055	36.678	8.610	1.00	46.91	C2	ATOM 3409 CB LEU 500	58.519	44.197	5.445	1.00	41.37	C2
ATOM 3367 N GLY 495	55.358	38.046	8.114	1.00	44.32	C2	ATOM 3410 CG LEU 500	59.303	44.862	4.351	1.00	42.70	C2
ATOM 3368 H GLY 495	54.450	38.112	7.753	1.00	0.00	C2	ATOM 3411 CD1 LEU 500	59.776	43.828	3.351	1.00	43.98	C2
ATOM 3369 CA GLY 495	56.104	39.272	8.368	1.00	42.36	C2	ATOM 3412 CD2 LEU 500	58.427	45.874	3.671	1.00	45.04	C2
ATOM 3370 C GLY 495	57.015	39.695	7.238	1.00	42.33	C2	ATOM 3413 C LEU 500	57.455	44.521	7.628	1.00	40.59	C2
ATOM 3371 O GLY 495	57.397	40.866	7.220	1.00	42.42	C2	ATOM 3414 O LEU 500	56.274	44.835	7.463	1.00	40.69	C2
ATOM 3372 N ILE 496	57.310	38.802	6.279	1.00	41.04	C2	ATOM 3415 N GLY 501	57.866	43.835	8.685	1.00	39.37	C2
ATOM 3373 H ILE 496	56.927	37.906	6.374	1.00	0.00	C2	ATOM 3416 H GLY 501	58.808	43.579	8.730	1.00	0.00	C2
ATOM 3374 CA ILE 496	58.259	38.993	5.192	1.00	41.15	C2	ATOM 3417 CA GLY 501	56.974	43.386	9.734	1.00	39.59	C2
ATOM 3375 CB ILE 496	57.929	40.216	4.253	1.00	38.60	C2	ATOM 3418 C GLY 501	55.816	44.324	10.092	1.00	39.66	C2
ATOM 3376 CG2 ILE 496	59.077	40.437	3.248	1.00	37.62	C2	ATOM 3419 O GLY 501	54.661	44.034	9.777	1.00	40.66	C2
ATOM 3377 CG1 ILE 496	56.662	39.964	3.480	1.00	36.39	C2	ATOM 3420 N PRO 502	55.986	45.462	10.742	1.00	39.90	C2
ATOM 3378 CD ILE 496	56.314	41.071	2.470	1.00	35.27	C2	ATOM 3421 CD PRO 502	57.227	45.908	11.335	1.00	41.18	C2
ATOM 3379 C ILE 496	59.672	39.203	5.749	1.00	42.91	C2	ATOM 3422 CA PRO 502	54.912	46.387	11.045	1.00	38.67	C2
ATOM 3380 O ILE 496	60.541	38.396	5.448	1.00	44.22	C2	ATOM 3423 CB PRO 502	55.594	47.494	11.791	1.00	39.23	C2
ATOM 3381 N SER 497	59.998	40.228	6.533	1.00	44.31	C2	ATOM 3424 CG PRO 502	56.989	47.405	11.221	1.00	41.36	C2
ATOM 3382 H SER 497	59.297	40.852	6.827	1.00	0.00	C2	ATOM 3425 C PRO 502	54.158	46.849	9.817	1.00	37.54	C2
ATOM 3383 CA SER 497	61.346	40.501	6.992	1.00	44.86	C2	ATOM 3426 O PRO 502	52.966	47.139	9.961	1.00	38.36	C2
ATOM 3384 CB SER 497	62.204	41.254	5.938	1.00	44.13	C2	ATOM 3427 N THR 503	54.728	46.887	8.609	1.00	35.13	C2
ATOM 3385 OG SER 497	62.181	42.673	6.033	1.00	40.74	C2	ATOM 3428 H THR 503	55.663	46.638	8.449	1.00	0.00	C2
ATOM 3386 HG SER 497	62.531	42.964	5.170	1.00	0.00	C2	ATOM 3429 CA THR 503	53.940	47.283	7.462	1.00	35.09	C2
ATOM 3387 C SER 497	61.164	41.413	8.185	1.00	45.85	C2	ATOM 3430 CB THR 503	54.832	47.376	6.245	1.00	34.48	C2
ATOM 3388 O SER 497	60.132	42.110	8.288	1.00	47.55	C2	ATOM 3431 OG1 THR 503	56.025	48.018	6.668	1.00	38.23	C2
ATOM 3389 N PRO 498	62.164	41.490	9.071	1.00	44.96	C2	ATOM 3432 HG1 THR 503	55.857	48.946	6.845	1.00	0.00	C2
ATOM 3390 CD PRO 498	63.338	40.621	9.126	1.00	42.33	C2	ATOM 3433 CG2 THR 503	54.197	48.162	5.126	1.00	35.56	C2
ATOM 3391 CA PRO 498	62.086	42.327	10.250	1.00	44.88	C2	ATOM 3434 C THR 503	52.836	46.252	7.215	1.00	35.37	C2
ATOM 3392 CB PRO 498	63.431	42.038	10.885	1.00	45.13	C2	ATOM 3435 O THR 503	51.671	46.552	6.915	1.00	37.11	C2
ATOM 3393 CG PRO 498	63.629	40.581	10.603	1.00	42.00	C2	ATOM 3436 N LEU 504	53.218	44.996	7.380	1.00	34.02	C2
ATOM 3394 C PRO 498	61.760	43.799	9.983	1.00	45.22	C2	ATOM 3437 H LEU 504	54.146	44.799	7.647	1.00	0.00	C2
ATOM 3395 O PRO 498	61.215	44.446	10.869	1.00	45.24	C2	ATOM 3438 CA LEU 504	52.301	43.912	7.173	1.00	32.50	C2
ATOM 3396 N GLU 499	62.017	44.314	8.777	1.00	46.16	C2	ATOM 3439 CB LEU 504	53.127	42.650	7.002	1.00	34.78	C2

FIG. 500

ATOM 3440 CG LEU 504	53.464	42.256	5.601	1.00	34.07	C2	ATOM 3483 O GLN 508	43.978	42.650	9.014	1.00	24.06	C2
ATOM 3441 CD1 LEU 504	54.163	40.977	5.667	1.00	37.97	C2	ATOM 3484 N LEU 509	45.375	44.019	10.090	1.00	26.07	C2
ATOM 3442 CD2 LEU 504	52.254	41.865	4.809	1.00	37.34	C2	ATOM 3485 H LEU 509	46.316	44.262	10.222	1.00	0.00	C2
ATOM 3443 C LEU 504	51.324	43.821	8.328	1.00	29.54	C2	ATOM 3486 CA LEU 509	44.378	44.640	10.977	1.00	25.71	C2
ATOM 3444 O LEU 504	50.141	43.562	8.078	1.00	30.40	C2	ATOM 3487 CB LEU 509	44.993	45.555	12.031	1.00	25.60	C2
ATOM 3445 N ASP 505	51.736	44.106	9.551	1.00	26.09	C2	ATOM 3488 CG LEU 509	45.838	44.757	13.042	1.00	29.00	C2
ATOM 3446 H ASP 505	52.689	44.269	9.699	1.00	0.00	C2	ATOM 3489 CD1 LEU 509	46.658	45.705	13.886	1.00	28.93	C2
ATOM 3447 CA ASP 505	50.798	44.084	10.643	1.00	27.88	C2	ATOM 3490 CD2 LEU 509	44.950	43.919	13.937	1.00	27.94	C2
ATOM 3448 CB ASP 505	51.446	44.345	11.926	1.00	29.86	C2	ATOM 3491 C LEU 509	43.465	45.471	10.130	1.00	25.17	C2
ATOM 3449 CG ASP 505	52.500	43.312	12.239	1.00	34.64	C2	ATOM 3492 O LEU 509	42.274	45.411	10.408	1.00	27.22	C2
ATOM 3450 OD1 ASP 505	52.663	42.298	11.534	1.00	41.04	C2	ATOM 3493 N ASP 510	43.899	46.208	9.101	1.00	23.77	C2
ATOM 3451 OD2 ASP 505	53.179	43.542	13.224	1.00	37.40	C2	ATOM 3494 H ASP 510	44.865	46.277	8.930	1.00	0.00	C2
ATOM 3452 C ASP 505	49.661	45.060	10.568	1.00	28.61	C2	ATOM 3495 CA ASP 510	42.955	46.898	8.240	1.00	22.66	C2
ATOM 3453 O ASP 505	48.566	44.739	11.039	1.00	30.30	C2	ATOM 3496 CB ASP 510	43.652	47.829	7.306	1.00	25.21	C2
ATOM 3454 N THR 506	49.894	46.242	10.002	1.00	28.29	C2	ATOM 3497 CG ASP 510	44.316	48.966	8.068	1.00	33.01	C2
ATOM 3455 H THR 506	50.823	46.493	9.804	1.00	0.00	C2	ATOM 3498 OD1 ASP 510	45.178	49.621	7.477	1.00	34.28	C2
ATOM 3456 CA THR 506	48.860	47.225	9.731	1.00	25.74	C2	ATOM 3499 OD2 ASP 510	43.988	49.209	9.250	1.00	34.44	C2
ATOM 3457 CB THR 506	49.497	48.556	9.336	1.00	26.14	C2	ATOM 3500 C ASP 510	42.104	45.980	7.398	1.00	23.72	C2
ATOM 3458 OG1 THR 506	49.944	49.099	10.588	1.00	31.63	C2	ATOM 3501 O ASP 510	40.897	46.220	7.387	1.00	24.80	C2
ATOM 3459 HG1 THR 506	49.243	49.072	11.246	1.00	0.00	C2	ATOM 3502 N VAL 511	42.632	44.984	6.659	1.00	22.38	C2
ATOM 3460 CG2 THR 506	48.594	49.517	8.619	1.00	24.46	C2	ATOM 3503 H VAL 511	43.611	44.900	6.620	1.00	0.00	C2
ATOM 3461 C THR 506	48.022	46.735	8.615	1.00	24.00	C2	ATOM 3504 CA VAL 511	41.823	44.010	5.961	1.00	21.89	C2
ATOM 3462 O THR 506	46.817	46.864	8.719	1.00	25.85	C2	ATOM 3505 CB VAL 511	42.752	42.924	5.366	1.00	22.71	C2
ATOM 3463 N LEU 507	48.554	46.196	7.525	1.00	23.51	C2	ATOM 3506 CG1 VAL 511	41.954	41.756	4.792	1.00	20.43	C2
ATOM 3464 H LEU 507	49.527	46.073	7.453	1.00	0.00	C2	ATOM 3507 CG2 VAL 511	43.529	43.524	4.210	1.00	16.19	C2
ATOM 3465 CA LEU 507	47.682	45.770	6.434	1.00	23.85	C2	ATOM 3508 C VAL 511	40.827	43.403	6.960	1.00	21.92	C2
ATOM 3466 CB LEU 507	48.574	45.408	5.196	1.00	23.33	C2	ATOM 3509 O VAL 511	39.625	43.447	6.719	1.00	23.46	C2
ATOM 3467 CG LEU 507	48.010	44.919	3.858	1.00	20.85	C2	ATOM 3510 N ALA 512	41.258	43.017	8.163	1.00	20.49	C2
ATOM 3468 CD1 LEU 507	46.771	45.650	3.455	1.00	24.13	C2	ATOM 3511 H ALA 512	42.216	43.063	8.361	1.00	0.00	C2
ATOM 3469 CD2 LEU 507	49.074	45.055	2.842	1.00	20.13	C2	ATOM 3512 CA ALA 512	40.388	42.357	9.108	1.00	20.83	C2
ATOM 3470 C LEU 507	46.766	44.640	6.880	1.00	24.09	C2	ATOM 3513 CB ALA 512	41.103	41.974	10.344	1.00	17.89	C2
ATOM 3471 O LEU 507	45.600	44.764	6.541	1.00	25.80	C2	ATOM 3514 C ALA 512	39.250	43.205	9.550	1.00	23.89	C2
ATOM 3472 N GLN 508	47.152	43.618	7.661	1.00	24.01	C2	ATOM 3515 O ALA 512	38.201	42.668	9.874	1.00	24.61	C2
ATOM 3473 H GLN 508	48.112	43.555	7.866	1.00	0.00	C2	ATOM 3516 N ASP 513	39.417	44.539	9.544	1.00	25.96	C2
ATOM 3474 CA GLN 508	46.228	42.625	8.214	1.00	23.71	C2	ATOM 3517 H ASP 513	40.300	44.888	9.291	1.00	0.00	C2
ATOM 3475 CB GLN 508	46.961	41.627	9.036	1.00	23.83	C2	ATOM 3518 CA ASP 513	38.374	45.471	9.947	1.00	25.37	C2
ATOM 3476 CG GLN 508	47.937	40.899	8.173	1.00	31.64	C2	ATOM 3519 CB ASP 513	38.958	46.787	10.373	1.00	26.88	C2
ATOM 3477 CD GLN 508	48.842	40.080	9.054	1.00	34.00	C2	ATOM 3520 CG ASP 513	39.682	46.679	11.712	1.00	32.35	C2
ATOM 3478 OE1 GLN 508	50.031	40.346	9.161	1.00	38.32	C2	ATOM 3521 OD1 ASP 513	40.371	47.644	12.058	1.00	35.06	C2
ATOM 3479 NE2 GLN 508	48.321	39.090	9.748	1.00	36.30	C2	ATOM 3522 OD2 ASP 513	39.580	45.646	12.390	1.00	34.10	C2
ATOM 3480 HE21 GLN 508	47.373	38.880	9.639	1.00	0.00	C2	ATOM 3523 C ASP 513	37.392	45.730	8.846	1.00	24.95	C2
ATOM 3481 HE22 GLN 508	48.891	38.636	10.406	1.00	0.00	C2	ATOM 3524 O ASP 513	36.185	45.868	9.090	1.00	26.92	C2
ATOM 3482 C GLN 508	45.105	43.123	9.111	1.00	24.24	C2	ATOM 3525 N PHE 514	37.867	45.739	7.634	1.00	22.88	C2

FIG. 5PP

ATOM 3526 H PHE 514	38.829	45.614	7.475	1.00	0.00	C2	ATOM 3569 O ILE 518	28.938	42.545	6.205	1.00	39.93	C2
ATOM 3527 CA PHE 514	36.974	45.922	6.530	1.00	24.09	C2	ATOM 3570 N TRP 519	30.842	41.785	7.179	1.00	38.64	C2
ATOM 3528 CB PHE 514	37.812	46.061	5.266	1.00	18.11	C2	ATOM 3571 H TRP 519	31.785	41.959	7.361	1.00	0.00	C2
ATOM 3529 CG PHE 514	36.956	46.470	4.072	1.00	17.86	C2	ATOM 3572 CA TRP 519	30.144	40.784	7.945	1.00	38.15	C2
ATOM 3530 CD1 PHE 514	35.715	47.089	4.245	1.00	15.18	C2	ATOM 3573 CB TRP 519	31.124	40.083	8.780	1.00	38.52	C2
ATOM 3531 CD2 PHE 514	37.440	46.197	2.804	1.00	13.77	C2	ATOM 3574 CG TRP 519	30.493	38.793	9.255	1.00	42.26	C2
ATOM 3532 CE1 PHE 514	34.983	47.419	3.130	1.00	14.53	C2	ATOM 3575 CD2 TRP 519	29.880	38.578	10.473	1.00	41.70	C2
ATOM 3533 CE2 PHE 514	36.693	46.539	1.705	1.00	12.10	C2	ATOM 3576 CE2 TRP 519	29.437	37.278	10.335	1.00	41.69	C2
ATOM 3534 CZ PHE 514	35.468	47.146	1.868	1.00	10.68	C2	ATOM 3577 CE3 TRP 519	29.648	39.282	11.629	1.00	42.26	C2
ATOM 3535 C PHE 514	36.026	44.703	6.450	1.00	29.23	C2	ATOM 3578 CD1 TRP 519	30.448	37.695	8.419	1.00	42.92	C2
ATOM 3536 O PHE 514	34.788	44.828	6.350	1.00	29.80	C2	ATOM 3579 NE1 TRP 519	29.788	36.793	9.115	1.00	44.19	C2
ATOM 3537 N ALA 515	36.604	43.490	6.531	1.00	31.15	C2	ATOM 3580 HE1 TRP 519	29.485	35.935	8.741	1.00	0.00	C2
ATOM 3538 H ALA 515	37.581	43.450	6.639	1.00	0.00	C2	ATOM 3581 CZ2 TRP 519	28.753	36.671	11.360	1.00	41.91	C2
ATOM 3539 CA ALA 515	35.839	42.260	6.416	1.00	32.36	C2	ATOM 3582 CZ3 TRP 519	28.964	38.666	12.652	1.00	41.91	C2
ATOM 3540 CB ALA 515	36.851	41.126	6.402	1.00	32.35	C2	ATOM 3583 CH2 TRP 519	28.522	37.375	12.515	1.00	41.05	C2
ATOM 3541 C ALA 515	34.801	42.089	7.535	1.00	32.39	C2	ATOM 3584 C TRP 519	29.027	41.368	8.815	1.00	39.33	C2
ATOM 3542 O ALA 515	33.676	41.609	7.331	1.00	32.63	C2	ATOM 3585 O TRP 519	27.888	40.919	8.726	1.00	38.28	C2
ATOM 3543 N THR 516	35.164	42.457	8.735	1.00	33.01	C2	ATOM 3586 N GLN 520	29.264	42.375	9.650	1.00	41.86	C2
ATOM 3544 H THR 516	36.117	42.578	8.935	1.00	0.00	C2	ATOM 3587 H GLN 520	30.180	42.717	9.700	1.00	0.00	C2
ATOM 3545 CA THR 516	34.231	42.566	9.821	1.00	35.18	C2	ATOM 3588 CA GLN 520	28.240	43.016	10.464	1.00	44.63	C2
ATOM 3546 CB THR 516	35.016	43.018	10.988	1.00	35.40	C2	ATOM 3589 CB GLN 520	28.691	44.198	11.239	1.00	47.03	C2
ATOM 3547 OG1 THR 516	35.685	41.818	11.336	1.00	42.65	C2	ATOM 3590 CG GLN 520	29.602	43.808	12.360	1.00	54.78	C2
ATOM 3548 HG1 THR 516	36.505	41.713	10.816	1.00	0.00	C2	ATOM 3591 CD GLN 520	29.910	45.009	13.243	1.00	60.14	C2
ATOM 3549 CG2 THR 516	34.262	43.672	12.097	1.00	35.56	C2	ATOM 3592 OE1 GLN 520	28.988	45.566	13.854	1.00	61.62	C2
ATOM 3550 C THR 516	33.140	43.554	9.482	1.00	37.62	C2	ATOM 3593 NE2 GLN 520	31.172	45.456	13.371	1.00	60.46	C2
ATOM 3551 O THR 516	32.005	43.315	9.857	1.00	40.37	C2	ATOM 3594 HE21 GLN 520	31.289	46.260	13.910	1.00	0.00	C2
ATOM 3552 N THR 517	33.387	44.666	8.802	1.00	38.61	C2	ATOM 3595 HE22 GLN 520	31.895	44.966	12.932	1.00	0.00	C2
ATOM 3553 H THR 517	34.291	44.850	8.469	1.00	0.00	C2	ATOM 3596 C GLN 520	27.141	43.577	9.621	1.00	46.28	C2
ATOM 3554 CA THR 517	32.359	45.641	8.512	1.00	38.92	C2	ATOM 3597 O GLN 520	26.001	43.474	10.059	1.00	48.62	C2
ATOM 3555 CB THR 517	33.123	46.903	7.962	1.00	40.46	C2	ATOM 3598 N GLN 521	27.362	44.145	8.442	1.00	46.99	C2
ATOM 3556 OG1 THR 517	33.832	47.429	9.103	1.00	43.22	C2	ATOM 3599 H GLN 521	28.272	44.257	8.092	1.00	0.00	C2
ATOM 3557 HG1 THR 517	34.536	46.815	9.335	1.00	0.00	C2	ATOM 3600 CA GLN 521	26.226	44.638	7.716	1.00	49.02	C2
ATOM 3558 CG2 THR 517	32.232	47.926	7.253	1.00	39.90	C2	ATOM 3601 CB GLN 521	26.632	45.553	6.566	1.00	50.06	C2
ATOM 3559 C THR 517	31.343	45.012	7.551	1.00	38.30	C2	ATOM 3602 CG GLN 521	25.456	46.226	5.790	1.00	50.87	C2
ATOM 3560 O THR 517	30.137	45.125	7.811	1.00	38.69	C2	ATOM 3603 CD GLN 521	24.616	47.278	6.534	1.00	51.82	C2
ATOM 3561 N ILE 518	31.790	44.344	6.466	1.00	37.54	C2	ATOM 3604 OE1 GLN 521	24.864	47.694	7.671	1.00	52.47	C2
ATOM 3562 H ILE 518	32.756	44.386	6.297	1.00	0.00	C2	ATOM 3605 NE2 GLN 521	23.577	47.776	5.888	1.00	50.36	C2
ATOM 3563 CA ILE 518	30.923	43.646	5.510	1.00	36.10	C2	ATOM 3606 HE21 GLN 521	23.392	47.455	4.987	1.00	0.00	C2
ATOM 3564 CB ILE 518	31.699	42.912	4.439	1.00	33.81	C2	ATOM 3607 HE22 GLN 521	23.044	48.424	6.390	1.00	0.00	C2
ATOM 3565 CG2 ILE 518	30.703	42.202	3.555	1.00	33.46	C2	ATOM 3608 C GLN 521	25.454	43.446	7.155	1.00	50.15	C2
ATOM 3566 CG1 ILE 518	32.623	43.842	3.699	1.00	32.91	C2	ATOM 3609 O GLN 521	24.214	43.514	7.177	1.00	51.82	C2
ATOM 3567 CD ILE 518	32.019	44.700	2.596	1.00	34.89	C2	ATOM 3610 N MET 522	26.057	42.348	6.668	1.00	49.18	C2
ATOM 3568 C ILE 518	30.172	42.591	6.317	1.00	38.63	C2	ATOM 3611 H MET 522	27.038	42.291	6.688	1.00	0.00	C2

FIG. 5QQ

ATOM 3612 CA MET 522	25.280	41.227	6.171	1.00	48.22	C2	ATOM 3655 OT2 MET 527	23.949	37.104	6.500	1.00	82.90	C2
ATOM 3613 CB MET 522	26.185	40.167	5.607	1.00	46.36	C2	ATOM 3656 CB MET 538	47.224	28.531	2.401	1.00	77.43	C3
ATOM 3614 CG MET 522	26.942	40.661	4.412	1.00	44.32	C2	ATOM 3657 CG MET 538	47.397	30.041	2.427	1.00	77.15	C3
ATOM 3615 SD MET 522	27.855	39.435	3.426	1.00	48.35	C2	ATOM 3658 SD MET 538	46.205	30.708	3.604	1.00	79.03	C3
ATOM 3616 CE MET 522	28.795	38.447	4.565	1.00	42.80	C2	ATOM 3659 CE MET 538	44.850	31.067	2.515	1.00	77.20	C3
ATOM 3617 C MET 522	24.453	40.642	7.316	1.00	50.14	C2	ATOM 3660 C MET 538	48.549	27.839	0.386	1.00	75.32	C3
ATOM 3618 O MET 522	23.380	40.124	7.038	1.00	50.60	C2	ATOM 3661 O MET 538	49.130	26.745	0.405	1.00	77.11	C3
ATOM 3619 N GLU 523	24.848	40.722	8.596	1.00	51.91	C2	ATOM 3662 HT1 MET 538	47.563	26.068	1.449	1.00	0.00	C3
ATOM 3620 H GLU 523	25.766	41.031	8.769	1.00	0.00	C2	ATOM 3663 HT2 MET 538	46.638	26.204	0.075	1.00	0.00	C3
ATOM 3621 CA GLU 523	24.027	40.313	9.718	1.00	54.53	C2	ATOM 3664 N MET 538	46.724	26.552	1.050	1.00	77.52	C3
ATOM 3622 CB GLU 523	24.654	40.486	11.081	1.00	54.60	C2	ATOM 3665 HT3 MET 538	45.873	26.401	1.617	1.00	0.00	C3
ATOM 3623 CG GLU 523	25.732	39.525	11.398	1.00	57.05	C2	ATOM 3666 CA MET 538	47.153	27.940	0.995	1.00	76.57	C3
ATOM 3624 CD GLU 523	25.386	38.150	10.888	1.00	61.72	C2	ATOM 3667 N PRO 539	49.089	28.870	-0.224	1.00	72.65	C3
ATOM 3625 OE1 GLU 523	24.515	37.487	11.477	1.00	64.60	C2	ATOM 3668 CD PRO 539	48.346	29.821	-1.046	1.00	72.26	C3
ATOM 3626 OE2 GLU 523	25.979	37.773	9.872	1.00	63.19	C2	ATOM 3669 CA PRO 539	50.526	29.020	-0.349	1.00	70.34	C3
ATOM 3627 C GLU 523	22.773	41.116	9.836	1.00	58.29	C2	ATOM 3670 CB PRO 539	50.677	30.365	-1.006	1.00	71.39	C3
ATOM 3628 O GLU 523	21.688	40.538	9.850	1.00	59.32	C2	ATOM 3671 CG PRO 539	49.437	30.503	-1.837	1.00	71.52	C3
ATOM 3629 N ALA 524	22.920	42.432	9.992	1.00	61.41	C2	ATOM 3672 C PRO 539	51.250	28.931	0.991	1.00	67.83	C3
ATOM 3630 H ALA 524	23.834	42.798	10.024	1.00	0.00	C2	ATOM 3673 O PRO 539	50.666	29.294	2.029	1.00	68.05	C3
ATOM 3631 CA ALA 524	21.815	43.360	10.076	1.00	63.58	C2	ATOM 3674 N ALA 540	52.484	28.417	0.961	1.00	64.48	C3
ATOM 3632 CB ALA 524	22.382	44.768	9.992	1.00	64.11	C2	ATOM 3675 H ALA 540	52.858	28.098	0.111	1.00	0.00	C3
ATOM 3633 C ALA 524	20.818	43.109	8.946	1.00	64.79	C2	ATOM 3676 CA ALA 540	53.389	28.498	2.112	1.00	61.83	C3
ATOM 3634 O ALA 524	19.655	42.824	9.206	1.00	65.69	C2	ATOM 3677 CB ALA 540	54.004	27.200	2.619	1.00	63.57	C3
ATOM 3635 N ALA 525	21.251	43.083	7.693	1.00	66.44	C2	ATOM 3678 C ALA 540	54.559	29.212	1.496	1.00	58.74	C3
ATOM 3636 H ALA 525	22.196	43.283	7.516	1.00	0.00	C2	ATOM 3679 O ALA 540	54.835	29.036	0.301	1.00	58.30	C3
ATOM 3637 CA ALA 525	20.371	42.789	6.574	1.00	68.58	C2	ATOM 3680 N PHE 541	55.256	30.008	2.292	1.00	55.25	C3
ATOM 3638 CB ALA 525	21.117	43.044	5.288	1.00	67.42	C2	ATOM 3681 H PHE 541	55.093	30.068	3.257	1.00	0.00	C3
ATOM 3639 C ALA 525	19.841	41.356	6.558	1.00	71.11	C2	ATOM 3682 CA PHE 541	56.299	30.814	1.702	1.00	51.38	C3
ATOM 3640 O ALA 525	19.116	40.946	5.651	1.00	71.65	C2	ATOM 3683 CB PHE 541	55.964	32.306	1.942	1.00	48.80	C3
ATOM 3641 N GLY 526	20.257	40.510	7.498	1.00	74.20	C2	ATOM 3684 CG PHE 541	54.789	32.703	1.058	1.00	45.77	C3
ATOM 3642 H GLY 526	21.019	40.780	8.043	1.00	0.00	C2	ATOM 3685 CD1 PHE 541	54.992	32.939	-0.279	1.00	44.20	C3
ATOM 3643 CA GLY 526	19.728	39.157	7.653	1.00	76.30	C2	ATOM 3686 CD2 PHE 541	53.507	32.747	1.582	1.00	44.76	C3
ATOM 3644 C GLY 526	20.430	38.085	6.842	1.00	78.19	C2	ATOM 3687 CE1 PHE 541	53.901	33.207	-1.074	1.00	43.98	C3
ATOM 3645 O GLY 526	20.174	36.910	7.094	1.00	79.05	C2	ATOM 3688 CE2 PHE 541	52.428	33.018	0.769	1.00	42.86	C3
ATOM 3646 N MET 527	21.388	38.433	5.970	1.00	80.23	C2	ATOM 3689 CZ PHE 541	52.625	33.247	-0.563	1.00	42.52	C3
ATOM 3647 H MET 527	21.759	39.337	6.075	1.00	0.00	C2	ATOM 3690 C PHE 541	57.586	30.364	2.333	1.00	49.80	C3
ATOM 3648 CA MET 527	22.055	37.489	5.063	1.00	81.73	C2	ATOM 3691 O PHE 541	58.002	30.807	3.395	1.00	49.55	C3
ATOM 3649 CB MET 527	22.771	38.256	3.928	1.00	81.72	C2	ATOM 3692 N ALA 542	58.172	29.442	1.562	1.00	48.21	C3
ATOM 3650 CG MET 527	22.385	39.719	3.720	1.00	83.52	C2	ATOM 3693 H ALA 542	57.825	29.298	0.656	1.00	0.00	C3
ATOM 3651 SD MET 527	23.364	40.523	2.436	1.00	87.64	C2	ATOM 3694 CA ALA 542	59.326	28.711	1.968	1.00	45.37	C3
ATOM 3652 CE MET 527	22.600	42.117	2.409	1.00	84.47	C2	ATOM 3695 CB ALA 542	59.700	27.749	0.898	1.00	45.21	C3
ATOM 3653 C MET 527	23.078	36.584	5.780	1.00	82.64	C2	ATOM 3696 C ALA 542	60.510	29.567	2.266	1.00	44.87	C3
ATOM 3654 OT1 MET 527	22.974	35.357	5.624	1.00	83.38	C2	ATOM 3697 O ALA 542	61.001	29.504	3.374	1.00	46.49	C3

FIG. 5RR

ATOM 3698 N SER 543	61.013	30.408	1.395	1.00	42.63	C3	ATOM 3741 CD ARG 547	58.344	33.858	4.076	1.00	40.56	C3
ATOM 3699 H SER 543	60.477	30.685	0.630	1.00	0.00	C3	ATOM 3742 NE ARG 547	59.743	34.058	4.345	1.00	47.90	C3
ATOM 3700 CA SER 543	62.253	31.108	1.708	1.00	40.31	C3	ATOM 3743 HE ARG 547	60.389	33.924	3.620	1.00	0.00	C3
ATOM 3701 CB SER 543	63.170	30.861	0.587	1.00	37.74	C3	ATOM 3744 CZ ARG 547	60.190	34.394	5.543	1.00	49.48	C3
ATOM 3702 OG SER 543	62.391	31.181	-0.554	1.00	35.74	C3	ATOM 3745 NH1 ARG 547	59.361	34.522	6.593	1.00	51.97	C3
ATOM 3703 HG SER 543	61.824	30.423	-0.751	1.00	0.00	C3	ATOM 3746 HH11 ARG 547	58.380	34.356	6.488	1.00	0.00	C3
ATOM 3704 C SER 543	62.087	32.613	1.896	1.00	40.88	C3	ATOM 3747 HH12 ARG 547	59.731	34.763	7.491	1.00	0.00	C3
ATOM 3705 O SER 543	61.016	33.115	1.536	1.00	42.63	C3	ATOM 3748 NH2 ARG 547	61.464	34.775	5.616	1.00	48.55	C3
ATOM 3706 N ALA 544	63.120	33.383	2.310	1.00	38.84	C3	ATOM 3749 HH21 ARG 547	62.025	34.803	4.788	1.00	0.00	C3
ATOM 3707 H ALA 544	63.929	32.951	2.650	1.00	0.00	C3	ATOM 3750 HH22 ARG 547	61.854	35.034	6.501	1.00	0.00	C3
ATOM 3708 CA ALA 544	63.035	34.836	2.345	1.00	37.31	C3	ATOM 3751 C ARG 547	58.167	37.181	0.590	1.00	32.26	C3
ATOM 3709 CB ALA 544	64.340	35.450	2.808	1.00	35.74	C3	ATOM 3752 O ARG 547	57.084	37.694	0.317	1.00	34.25	C3
ATOM 3710 C ALA 544	62.723	35.372	0.947	1.00	37.06	C3	ATOM 3753 N ARG 548	59.348	37.717	0.205	1.00	31.44	C3
ATOM 3711 O ALA 544	61.829	36.220	0.820	1.00	38.23	C3	ATOM 3754 H ARG 548	60.148	37.203	0.444	1.00	0.00	C3
ATOM 3712 N PHE 545	63.357	34.881	-0.130	1.00	35.72	C3	ATOM 3755 CA ARG 548	59.529	38.980	-0.555	1.00	30.01	C3
ATOM 3713 H PHE 545	64.131	34.298	-0.010	1.00	0.00	C3	ATOM 3756 CB ARG 548	60.995	39.213	-0.949	1.00	25.42	C3
ATOM 3714 CA PHE 545	62.992	35.268	-1.484	1.00	33.66	C3	ATOM 3757 CG ARG 548	61.820	39.361	0.294	1.00	26.11	C3
ATOM 3715 CB PHE 545	63.738	34.534	-2.593	1.00	29.71	C3	ATOM 3758 CD ARG 548	63.280	39.158	-0.054	1.00	29.34	C3
ATOM 3716 CG PHE 545	63.140	34.742	-3.990	1.00	29.62	C3	ATOM 3759 NE ARG 548	64.044	39.162	1.189	1.00	32.30	C3
ATOM 3717 CD1 PHE 545	62.317	33.788	-4.557	1.00	29.80	C3	ATOM 3760 HE ARG 548	63.572	38.883	1.995	1.00	0.00	C3
ATOM 3718 CD2 PHE 545	63.371	35.915	-4.689	1.00	31.90	C3	ATOM 3761 CZ ARG 548	65.344	39.518	1.325	1.00	32.66	C3
ATOM 3719 CE1 PHE 545	61.723	33.984	-5.795	1.00	28.61	C3	ATOM 3762 NH1 ARG 548	66.159	39.923	0.335	1.00	34.98	C3
ATOM 3720 CE2 PHE 545	62.777	36.113	-5.928	1.00	31.00	C3	ATOM 3763 HH11 ARG 548	67.107	40.170	0.533	1.00	0.00	C3
ATOM 3721 CZ PHE 545	61.955	35.150	-6.480	1.00	31.01	C3	ATOM 3764 HH12 ARG 548	65.812	39.981	-0.600	1.00	0.00	C3
ATOM 3722 C PHE 545	61.543	34.900	-1.667	1.00	34.81	C3	ATOM 3765 NH2 ARG 548	65.837	39.518	2.549	1.00	32.03	C3
ATOM 3723 O PHE 545	60.901	35.660	-2.389	1.00	38.88	C3	ATOM 3766 HH21 ARG 548	66.788	39.783	2.708	1.00	0.00	C3
ATOM 3724 N GLN 546	60.912	33.847	-1.135	1.00	34.77	C3	ATOM 3767 HH22 ARG 548	65.250	39.275	3.321	1.00	0.00	C3
ATOM 3725 H GLN 546	61.396	33.223	-0.558	1.00	0.00	C3	ATOM 3768 C ARG 548	58.713	38.997	-1.832	1.00	29.81	C3
ATOM 3726 CA GLN 546	59.490	33.637	-1.433	1.00	33.72	C3	ATOM 3769 O ARG 548	57.778	39.790	-1.968	1.00	33.03	C3
ATOM 3727 CB GLN 546	59.145	32.232	-1.140	1.00	34.85	C3	ATOM 3770 N ALA 549	58.979	38.102	-2.761	1.00	27.87	C3
ATOM 3728 CG GLN 546	59.582	31.585	-2.444	1.00	42.45	C3	ATOM 3771 H ALA 549	59.684	37.436	-2.601	1.00	0.00	C3
ATOM 3729 CD GLN 546	59.374	30.085	-2.473	1.00	46.05	C3	ATOM 3772 CA ALA 549	58.227	38.045	-3.984	1.00	27.18	C3
ATOM 3730 OE1 GLN 546	59.287	29.472	-1.399	1.00	48.90	C3	ATOM 3773 CB ALA 549	58.797	36.934	-4.857	1.00	28.72	C3
ATOM 3731 NE2 GLN 546	59.339	29.442	-3.644	1.00	47.20	C3	ATOM 3774 C ALA 549	56.748	37.810	-3.770	1.00	25.91	C3
ATOM 3732 HE21 GLN 546	59.476	29.948	-4.472	1.00	0.00	C3	ATOM 3775 O ALA 549	55.896	38.337	-4.468	1.00	26.03	C3
ATOM 3733 HE22 GLN 546	59.154	28.481	-3.609	1.00	0.00	C3	ATOM 3776 N GLY 550	56.421	37.074	-2.748	1.00	26.53	C3
ATOM 3734 C GLN 546	58.504	34.541	-0.729	1.00	31.62	C3	ATOM 3777 H GLY 550	57.103	36.657	-2.185	1.00	0.00	C3
ATOM 3735 O GLN 546	57.429	34.850	-1.233	1.00	29.88	C3	ATOM 3778 CA GLY 550	55.055	36.805	-2.457	1.00	26.08	C3
ATOM 3736 N ARG 547	58.907	34.929	0.465	1.00	31.09	C3	ATOM 3779 C GLY 550	54.410	38.098	-2.075	1.00	26.94	C3
ATOM 3737 H ARG 547	59.750	34.566	0.811	1.00	0.00	C3	ATOM 3780 O GLY 550	53.339	38.380	-2.608	1.00	26.59	C3
ATOM 3738 CA ARG 547	58.160	35.830	1.282	1.00	31.43	C3	ATOM 3781 N GLY 551	55.073	38.917	-1.234	1.00	27.78	C3
ATOM 3739 CB ARG 547	58.813	35.874	2.601	1.00	31.74	C3	ATOM 3782 H GLY 551	55.958	38.642	-0.925	1.00	0.00	C3
ATOM 3740 CG ARG 547	57.906	35.224	3.623	1.00	37.02	C3	ATOM 3783 CA GLY 551	54.540	40.212	-0.779	1.00	26.51	C3

FIG. 5SS

ATOM 3784 C GLY 551	54.302	41.113	-1.994	1.00	26.82	C3	ATOM 3827 CA HIS 557	46.396	41.605	-6.401	1.00	33.64	C3
ATOM 3785 O GLY 551	53.313	41.852	-2.065	1.00	27.82	C3	ATOM 3828 CB HIS 557	46.203	40.142	-6.242	1.00	37.88	C3
ATOM 3786 N VAL 552	55.154	41.013	-3.012	1.00	25.81	C3	ATOM 3829 CG HIS 557	46.986	39.518	-7.348	1.00	42.44	C3
ATOM 3787 H VAL 552	55.916	40.396	-2.954	1.00	0.00	C3	ATOM 3830 CD2 HIS 557	46.694	39.665	-8.675	1.00	43.63	C3
ATOM 3788 CA VAL 552	54.952	41.843	-4.176	1.00	28.39	C3	ATOM 3831 ND1 HIS 557	48.108	38.837	-7.209	1.00	45.23	C3
ATOM 3789 CB VAL 552	56.178	41.743	-5.190	1.00	26.20	C3	ATOM 3832 HD1 HIS 557	48.641	38.764	-6.385	1.00	0.00	C3
ATOM 3790 CG1 VAL 552	55.917	42.391	-6.541	1.00	26.53	C3	ATOM 3833 CE1 HIS 557	48.524	38.569	-8.414	1.00	46.56	C3
ATOM 3791 CG2 VAL 552	57.327	42.546	-4.594	1.00	26.44	C3	ATOM 3834 NE2 HIS 557	47.676	39.066	-9.283	1.00	45.62	C3
ATOM 3792 C VAL 552	53.650	41.406	-4.820	1.00	29.05	C3	ATOM 3835 HE2 HIS 557	47.793	39.018	-10.257	1.00	0.00	C3
ATOM 3793 O VAL 552	52.744	42.251	-4.888	1.00	31.68	C3	ATOM 3836 C HIS 557	45.383	42.249	-5.520	1.00	32.94	C3
ATOM 3794 N LEU 553	53.455	40.120	-5.176	1.00	27.20	C3	ATOM 3837 O HIS 557	44.256	42.444	-5.934	1.00	33.08	C3
ATOM 3795 H LEU 553	54.122	39.447	-4.908	1.00	0.00	C3	ATOM 3838 N LEU 558	45.744	42.534	-4.280	1.00	33.05	C3
ATOM 3796 CA LEU 553	52.266	39.705	-5.915	1.00	23.80	C3	ATOM 3839 H LEU 558	46.657	42.356	-3.986	1.00	0.00	C3
ATOM 3797 CB LEU 553	52.357	38.262	-6.363	1.00	24.86	C3	ATOM 3840 CA LEU 558	44.817	43.125	-3.348	1.00	31.91	C3
ATOM 3798 CG LEU 553	53.432	37.955	-7.357	1.00	23.06	C3	ATOM 3841 CB LEU 558	45.420	43.107	-1.965	1.00	29.25	C3
ATOM 3799 CD1 LEU 553	54.073	36.623	-7.092	1.00	24.31	C3	ATOM 3842 CG LEU 558	44.605	43.615	-0.818	1.00	26.02	C3
ATOM 3800 CD2 LEU 553	52.794	38.061	-8.703	1.00	21.87	C3	ATOM 3843 CD1 LEU 558	43.279	42.883	-0.742	1.00	25.00	C3
ATOM 3801 C LEU 553	51.012	39.825	-5.114	1.00	23.72	C3	ATOM 3844 CD2 LEU 558	45.496	43.571	0.408	1.00	22.86	C3
ATOM 3802 O LEU 553	49.982	40.138	-5.712	1.00	24.63	C3	ATOM 3845 C LEU 558	44.527	44.521	-3.783	1.00	32.47	C3
ATOM 3803 N VAL 554	50.962	39.580	-3.803	1.00	24.37	C3	ATOM 3846 O LEU 558	43.402	44.944	-3.596	1.00	33.97	C3
ATOM 3804 H VAL 554	51.774	39.350	-3.295	1.00	0.00	C3	ATOM 3847 N GLN 559	45.482	45.231	-4.370	1.00	34.36	C3
ATOM 3805 CA VAL 554	49.660	39.691	-3.180	1.00	26.36	C3	ATOM 3848 H GLN 559	46.386	44.855	-4.406	1.00	0.00	C3
ATOM 3806 CB VAL 554	49.472	38.751	-1.802	1.00	26.55	C3	ATOM 3849 CA GLN 559	45.255	46.569	-4.912	1.00	36.75	C3
ATOM 3807 CG1 VAL 554	50.696	37.933	-1.418	1.00	23.95	C3	ATOM 3850 CB GLN 559	46.598	47.067	-5.470	1.00	39.63	C3
ATOM 3808 CG2 VAL 554	48.953	39.614	-0.682	1.00	25.58	C3	ATOM 3851 CG GLN 559	46.707	48.543	-5.875	1.00	42.07	C3
ATOM 3809 C VAL 554	49.322	41.175	-2.960	1.00	27.53	C3	ATOM 3852 CD GLN 559	46.530	49.618	-4.793	1.00	41.53	C3
ATOM 3810 O VAL 554	48.142	41.502	-3.192	1.00	27.44	C3	ATOM 3853 OE1 GLN 559	45.961	50.687	-5.057	1.00	41.25	C3
ATOM 3811 N ALA 555	50.277	42.106	-2.716	1.00	28.04	C3	ATOM 3854 NE2 GLN 559	46.951	49.416	-3.561	1.00	37.96	C3
ATOM 3812 H ALA 555	51.221	41.831	-2.658	1.00	0.00	C3	ATOM 3855 HE21 GLN 559	47.271	48.528	-3.311	1.00	0.00	C3
ATOM 3813 CA ALA 555	49.956	43.539	-2.509	1.00	28.57	C3	ATOM 3856 HE22 GLN 559	47.001	50.190	-2.967	1.00	0.00	C3
ATOM 3814 CB ALA 555	51.161	44.427	-2.217	1.00	28.07	C3	ATOM 3857 C GLN 559	44.142	46.635	-5.976	1.00	35.22	C3
ATOM 3815 C ALA 555	49.402	44.055	-3.803	1.00	28.12	C3	ATOM 3858 O GLN 559	43.165	47.404	-5.839	1.00	34.99	C3
ATOM 3816 O ALA 555	48.425	44.803	-3.847	1.00	30.12	C3	ATOM 3859 N SER 560	44.260	45.817	-7.025	1.00	33.46	C3
ATOM 3817 N SER 556	49.985	43.521	-4.839	1.00	26.44	C3	ATOM 3860 H SER 560	45.083	45.292	-7.154	1.00	0.00	C3
ATOM 3818 H SER 556	50.781	42.956	-4.710	1.00	0.00	C3	ATOM 3861 CA SER 560	43.222	45.683	-8.049	1.00	32.88	C3
ATOM 3819 CA SER 556	49.548	43.810	-6.152	1.00	30.09	C3	ATOM 3862 CB SER 560	43.693	44.776	-9.088	1.00	34.05	C3
ATOM 3820 CB SER 556	50.684	43.277	-6.965	1.00	31.42	C3	ATOM 3863 OG SER 560	45.021	45.174	-9.281	1.00	42.40	C3
ATOM 3821 OG SER 556	50.442	43.338	-8.344	1.00	37.88	C3	ATOM 3864 HG SER 560	45.042	45.996	-9.783	1.00	0.00	C3
ATOM 3822 HG SER 556	49.966	44.144	-8.576	1.00	0.00	C3	ATOM 3865 C SER 560	41.885	45.133	-7.559	1.00	32.01	C3
ATOM 3823 C SER 556	48.143	43.243	-6.454	1.00	32.78	C3	ATOM 3866 O SER 560	40.791	45.582	-7.920	1.00	32.23	C3
ATOM 3824 O SER 556	47.287	43.961	-7.003	1.00	34.56	C3	ATOM 3867 N PHE 561	41.969	44.123	-6.710	1.00	29.50	C3
ATOM 3825 N HIS 557	47.750	42.019	-6.088	1.00	32.78	C3	ATOM 3868 H PHE 561	42.850	43.767	-6.464	1.00	0.00	C3
ATOM 3826 H HIS 557	48.350	41.453	-5.560	1.00	0.00	C3	ATOM 3869 CA PHE 561	40.803	43.529	-6.118	1.00	28.17	C3

FIG. 5TT

ATOM 3870 CB PHE 561	41.237	42.541	-5.040	1.00	26.27	C3	ATOM 3913 O SER 565	34.038	48.287	-4.446	1.00	46.87	C3
ATOM 3871 CG PHE 561	40.069	41.966	-4.268	1.00	25.68	C3	ATOM 3914 N TYR 566	35.965	49.093	-5.146	1.00	47.59	C3
ATOM 3872 CD1 PHE 561	39.282	40.999	-4.846	1.00	25.44	C3	ATOM 3915 H TYR 566	36.893	48.908	-5.386	1.00	0.00	C3
ATOM 3873 CD2 PHE 561	39.761	42.482	-3.051	1.00	25.45	C3	ATOM 3916 CA TYR 566	35.518	50.474	-5.086	1.00	49.68	C3
ATOM 3874 CE1 PHE 561	38.166	40.551	-4.215	1.00	21.49	C3	ATOM 3917 CB TYR 566	36.765	51.362	-5.164	1.00	56.17	C3
ATOM 3875 CE2 PHE 561	38.635	42.027	-2.421	1.00	26.89	C3	ATOM 3918 CG TYR 566	36.715	52.622	-6.007	1.00	64.64	C3
ATOM 3876 CZ PHE 561	37.853	41.074	-3.008	1.00	24.29	C3	ATOM 3919 CD1 TYR 566	37.264	52.538	-7.278	1.00	69.53	C3
ATOM 3877 C PHE 561	39.987	44.645	-5.505	1.00	28.81	C3	ATOM 3920 CE1 TYR 566	37.212	53.613	-8.151	1.00	73.71	C3
ATOM 3878 O PHE 561	38.789	44.697	-5.731	1.00	29.31	C3	ATOM 3921 CD2 TYR 566	36.109	53.797	-5.569	1.00	67.98	C3
ATOM 3879 N LEU 562	40.672	45.565	-4.797	1.00	28.39	C3	ATOM 3922 CE2 TYR 566	36.048	54.888	-6.441	1.00	72.92	C3
ATOM 3880 H LEU 562	41.643	45.462	-4.707	1.00	0.00	C3	ATOM 3923 CZ TYR 566	36.599	54.787	-7.735	1.00	75.29	C3
ATOM 3881 CA LEU 562	40.033	46.617	-4.057	1.00	26.51	C3	ATOM 3924 OH TYR 566	36.538	55.838	-8.652	1.00	77.42	C3
ATOM 3882 CB LEU 562	40.964	47.203	-3.074	1.00	23.80	C3	ATOM 3925 HH TYR 566	36.905	55.565	-9.494	1.00	0.00	C3
ATOM 3883 CG LEU 562	41.047	46.411	-1.816	1.00	24.85	C3	ATOM 3926 C TYR 566	34.524	50.696	-6.217	1.00	48.48	C3
ATOM 3884 CD1 LEU 562	42.207	46.868	-1.049	1.00	24.07	C3	ATOM 3927 O TYR 566	33.545	51.376	-5.950	1.00	46.35	C3
ATOM 3885 CD2 LEU 562	39.794	46.551	-1.008	1.00	25.13	C3	ATOM 3928 N ALA 567	34.679	50.115	-7.417	1.00	49.14	C3
ATOM 3886 C LEU 562	39.586	47.669	-4.988	1.00	29.27	C3	ATOM 3929 H ALA 567	35.512	49.625	-7.572	1.00	0.00	C3
ATOM 3887 O LEU 562	38.580	48.304	-4.681	1.00	29.83	C3	ATOM 3930 CA ALA 567	33.670	50.165	-8.490	1.00	52.09	C3
ATOM 3888 N GLU 563	40.239	47.871	-6.115	1.00	30.88	C3	ATOM 3931 CB ALA 567	34.210	49.574	-9.788	1.00	48.37	C3
ATOM 3889 H GLU 563	41.052	47.368	-6.325	1.00	0.00	C3	ATOM 3932 C ALA 567	32.315	49.449	-8.238	1.00	55.31	C3
ATOM 3890 CA GLU 563	39.738	48.908	-6.966	1.00	36.88	C3	ATOM 3933 O ALA 567	31.226	50.008	-8.501	1.00	56.87	C3
ATOM 3891 CB GLU 563	40.660	49.142	-8.137	1.00	40.80	C3	ATOM 3934 N VAL 568	32.247	48.211	-7.736	1.00	57.66	C3
ATOM 3892 CG GLU 563	41.999	49.628	-7.682	1.00	48.55	C3	ATOM 3935 H VAL 568	33.083	47.729	-7.564	1.00	0.00	C3
ATOM 3893 CD GLU 563	43.148	49.277	-8.619	1.00	55.42	C3	ATOM 3936 CA VAL 568	30.980	47.573	-7.490	1.00	59.61	C3
ATOM 3894 OE1 GLU 563	44.301	49.283	-8.135	1.00	57.39	C3	ATOM 3937 CB VAL 568	31.119	46.031	-7.339	1.00	58.96	C3
ATOM 3895 OE2 GLU 563	42.886	48.986	-9.808	1.00	56.44	C3	ATOM 3938 CG1 VAL 568	31.239	45.508	-5.911	1.00	60.27	C3
ATOM 3896 C GLU 563	38.375	48.469	-7.466	1.00	39.02	C3	ATOM 3939 CG2 VAL 568	29.851	45.471	-7.922	1.00	60.44	C3
ATOM 3897 O GLU 563	37.388	49.170	-7.270	1.00	39.09	C3	ATOM 3940 C VAL 568	30.393	48.177	-6.245	1.00	62.66	C3
ATOM 3898 N VAL 564	38.289	47.255	-8.030	1.00	42.30	C3	ATOM 3941 O VAL 568	29.174	48.154	-6.180	1.00	64.78	C3
ATOM 3899 H VAL 564	39.107	46.714	-8.074	1.00	0.00	C3	ATOM 3942 N LEU 569	31.075	48.737	-5.248	1.00	66.15	C3
ATOM 3900 CA VAL 564	37.052	46.683	-8.558	1.00	41.84	C3	ATOM 3943 H LEU 569	32.058	48.719	-5.243	1.00	0.00	C3
ATOM 3901 CB VAL 564	37.333	45.255	-9.041	1.00	42.27	C3	ATOM 3944 CA LEU 569	30.359	49.334	-4.123	1.00	69.85	C3
ATOM 3902 CG1 VAL 564	36.055	44.538	-9.435	1.00	41.17	C3	ATOM 3945 CB LEU 569	31.285	49.858	-3.023	1.00	69.91	C3
ATOM 3903 CG2 VAL 564	38.283	45.348	-10.241	1.00	42.11	C3	ATOM 3946 CG LEU 569	32.007	48.887	-2.095	1.00	70.17	C3
ATOM 3904 C VAL 564	36.030	46.709	-7.442	1.00	41.68	C3	ATOM 3947 CD1 LEU 569	32.847	49.687	-1.140	1.00	70.19	C3
ATOM 3905 O VAL 564	34.892	47.015	-7.697	1.00	42.34	C3	ATOM 3948 CD2 LEU 569	31.039	48.054	-1.286	1.00	70.56	C3
ATOM 3906 N SER 565	36.419	46.501	-6.206	1.00	42.75	C3	ATOM 3949 C LEU 569	29.567	50.509	-4.667	1.00	72.69	C3
ATOM 3907 H SER 565	37.333	46.173	-6.063	1.00	0.00	C3	ATOM 3950 O LEU 569	28.365	50.553	-4.425	1.00	73.80	C3
ATOM 3908 CA SER 565	35.562	46.602	-5.064	1.00	44.85	C3	ATOM 3951 N ARG 570	30.180	51.391	-5.479	1.00	75.95	C3
ATOM 3909 CB SER 565	36.344	46.013	-3.894	1.00	46.54	C3	ATOM 3952 H ARG 570	31.153	51.299	-5.580	1.00	0.00	C3
ATOM 3910 OG SER 565	35.590	45.714	-2.731	1.00	51.75	C3	ATOM 3953 CA ARG 570	29.510	52.498	-6.173	1.00	78.78	C3
ATOM 3911 HG SER 565	35.060	46.481	-2.491	1.00	0.00	C3	ATOM 3954 CB ARG 570	30.399	53.068	-7.308	1.00	80.07	C3
ATOM 3912 C SER 565	35.167	48.063	-4.871	1.00	45.70	C3	ATOM 3955 CG ARG 570	29.658	54.222	-7.997	1.00	84.16	C3

FIG. 5UU

ATOM 3956	CD ARG 570	29.976	54.744	-9.417	1.00	85.66	C3	ATOM 3999	H2 H2O 603	26.288	23.435	4.992	1.00	0.00	W
ATOM 3957	NE ARG 570	28.892	55.690	-9.737	1.00	85.67	C3	ATOM 4000	OH2 H2O 605	47.880	37.960	12.073	1.00	56.30	W
ATOM 3958	HE ARG 570	27.971	55.354	-9.727	1.00	0.00	C3	ATOM 4001	H1 H2O 605	47.789	37.874	13.031	1.00	0.00	W
ATOM 3959	CZ ARG 570	29.051	56.991	-10.026	1.00	85.06	C3	ATOM 4002	H2 H2O 605	46.980	37.858	11.753	1.00	0.00	W
ATOM 3960	NH1 ARG 570	30.240	57.590	-10.082	1.00	84.43	C3	ATOM 4003	OH2 H2O 607	40.001	49.224	7.214	1.00	40.04	W
ATOM 3961	HH11 ARG 570	31.069	57.056	-9.908	1.00	0.00	C3	ATOM 4004	H1 H2O 607	40.471	48.761	7.909	1.00	0.00	W
ATOM 3962	HH12 ARG 570	30.295	58.561	-10.314	1.00	0.00	C3	ATOM 4005	H2 H2O 607	40.123	48.642	6.457	1.00	0.00	W
ATOM 3963	NH2 ARG 570	27.958	57.736	-10.154	1.00	84.57	C3	ATOM 4006	OH2 H2O 610	59.883	42.530	-9.698	1.00	38.90	W
ATOM 3964	HH21 ARG 570	27.059	57.316	-10.030	1.00	0.00	C3	ATOM 4007	H1 H2O 610	60.512	41.833	-9.477	1.00	0.00	W
ATOM 3965	HH22 ARG 570	28.042	58.708	-10.375	1.00	0.00	C3	ATOM 4008	H2 H2O 610	59.189	42.046	-10.160	1.00	0.00	W
ATOM 3966	C ARG 570	28.201	52.009	-6.812	1.00	79.92	C3	ATOM 4009	OH2 H2O 611	57.178	35.940	-14.220	1.00	34.63	W
ATOM 3967	O ARG 570	27.107	52.565	-6.709	1.00	79.61	C3	ATOM 4010	H1 H2O 611	57.174	36.545	-14.974	1.00	0.00	W
ATOM 3968	N HIS 571	28.362	50.900	-7.511	1.00	81.35	C3	ATOM 4011	H2 H2O 611	57.989	36.211	-13.757	1.00	0.00	W
ATOM 3969	H HIS 571	29.214	50.417	-7.440	1.00	0.00	C3	ATOM 4012	OH2 H2O 612	25.793	27.337	19.130	1.00	29.21	W
ATOM 3970	CA HIS 571	27.247	50.306	-8.197	1.00	82.75	C3	ATOM 4013	H1 H2O 612	26.709	27.661	19.145	1.00	0.00	W
ATOM 3971	CB HIS 571	27.882	49.274	-9.167	1.00	83.42	C3	ATOM 4014	H2 H2O 612	25.762	26.792	19.929	1.00	0.00	W
ATOM 3972	CG HIS 571	28.633	50.029	-10.280	1.00	85.08	C3	ATOM 4015	OH2 H2O 615	29.766	34.284	9.444	1.00	45.03	W
ATOM 3973	CD2 HIS 571	28.921	49.529	-11.532	1.00	85.81	C3	ATOM 4016	H1 H2O 615	30.017	34.618	10.308	1.00	0.00	W
ATOM 3974	ND1 HIS 571	29.074	51.303	-10.268	1.00	86.25	C3	ATOM 4017	H2 H2O 615	29.113	33.592	9.660	1.00	0.00	W
ATOM 3975	HD1 HIS 571	29.080	51.900	-9.489	1.00	0.00	C3	ATOM 4018	OH2 H2O 617	37.316	40.012	10.872	1.00	35.21	W
ATOM 3976	CE1 HIS 571	29.595	51.595	-11.439	1.00	86.01	C3	ATOM 4019	H1 H2O 617	36.600	40.017	11.519	1.00	0.00	W
ATOM 3977	NE2 HIS 571	29.494	50.518	-12.187	1.00	86.28	C3	ATOM 4020	H2 H2O 617	37.944	39.376	11.259	1.00	0.00	W
ATOM 3978	HE2 HIS 571	29.801	50.468	-13.119	1.00	0.00	C3	ATOM 4021	OH2 H2O 619	40.370	52.041	-7.387	1.00	29.62	W
ATOM 3979	C HIS 571	26.225	49.759	-7.195	1.00	83.31	C3	ATOM 4022	H1 H2O 619	40.672	52.724	-6.779	1.00	0.00	W
ATOM 3980	O HIS 571	25.075	50.194	-7.301	1.00	84.06	C3	ATOM 4023	H2 H2O 619	39.505	51.810	-7.052	1.00	0.00	W
ATOM 3981	N LEU 572	26.540	48.963	-6.158	1.00	83.11	C3	ATOM 4024	OH2 H2O 621	27.903	32.440	10.664	1.00	39.99	W
ATOM 3982	H LEU 572	27.474	48.824	-5.915	1.00	0.00	C3	ATOM 4025	H1 H2O 621	27.553	33.207	11.141	1.00	0.00	W
ATOM 3983	CA LEU 572	25.527	48.457	-5.241	1.00	83.71	C3	ATOM 4026	H2 H2O 621	27.929	31.808	11.398	1.00	0.00	W
ATOM 3984	CB LEU 572	26.085	47.267	-4.454	1.00	83.57	C3	ATOM 4027	OH2 H2O 622	25.057	31.972	13.675	1.00	32.70	W
ATOM 3985	CG LEU 572	25.439	45.884	-4.721	1.00	83.79	C3	ATOM 4028	H1 H2O 622	24.393	32.417	14.215	1.00	0.00	W
ATOM 3986	CD1 LEU 572	25.783	45.386	-6.127	1.00	84.16	C3	ATOM 4029	H2 H2O 622	24.469	31.428	13.112	1.00	0.00	W
ATOM 3987	CD2 LEU 572	25.958	44.866	-3.714	1.00	84.08	C3	ATOM 4030	OH2 H2O 623	20.791	28.583	14.218	1.00	50.17	W
ATOM 3988	C LEU 572	24.997	49.511	-4.261	1.00	84.78	C3	ATOM 4031	H1 H2O 623	20.499	28.803	13.325	1.00	0.00	W
ATOM 3989	O LEU 572	24.265	49.192	-3.295	1.00	84.85	C3	ATOM 4032	H2 H2O 623	19.939	28.549	14.688	1.00	0.00	W
ATOM 3990	N ALA 573	25.349	50.796	-4.483	1.00	85.56	C3	ATOM 4033	OH2 H2O 625	22.680	78.881	2.761	1.00	40.48	W
ATOM 3991	H ALA 573	26.020	50.980	-5.174	1.00	0.00	C3	ATOM 4034	H1 H2O 625	21.938	78.856	3.375	1.00	0.00	W
ATOM 3992	CA ALA 573	24.822	51.925	-3.721	1.00	85.90	C3	ATOM 4035	H2 H2O 625	22.266	79.246	1.970	1.00	0.00	W
ATOM 3993	CB ALA 573	25.600	53.207	-3.970	1.00	85.79	C3	ATOM 4036	OH2 H2O 626	39.689	36.486	9.730	1.00	23.36	W
ATOM 3994	C ALA 573	23.373	52.245	-4.057	1.00	87.21	C3	ATOM 4037	H1 H2O 626	39.090	35.724	9.672	1.00	0.00	W
ATOM 3995	OT1 ALA 573	22.610	52.413	-3.099	1.00	88.33	C3	ATOM 4038	H2 H2O 626	39.627	36.872	8.853	1.00	0.00	W
ATOM 3996	OT2 ALA 573	23.022	52.309	-5.248	1.00	88.34	C3	ATOM 4039	OH2 H2O 627	42.035	78.320	5.697	1.00	46.19	W
ATOM 3997	OH2 H2O 603	26.735	24.280	5.161	1.00	27.42	W	ATOM 4040	H1 H2O 627	42.416	77.450	5.832	1.00	0.00	W
ATOM 3998	H1 H2O 603	27.332	24.335	4.407	1.00	0.00	W	ATOM 4041	H2 H2O 627	41.243	78.146	5.181	1.00	0.00	W

FIG. 5W

ATOM	4042	OH2 H2O	631	47.227	31.440	6.299	1.00	34.17	W	ATOM	4085	H1 H2O	663	29.380	62.827	2.739	1.00	0.00	W
ATOM	4043	H1 H2O	631	47.533	32.209	5.809	1.00	0.00	W	ATOM	4086	H2 H2O	663	28.377	63.526	1.887	1.00	0.00	W
ATOM	4044	H2 H2O	631	47.442	30.713	5.714	1.00	0.00	W	ATOM	4087	OH2 H2O	664	27.132	25.640	7.430	1.00	50.65	W
ATOM	4045	OH2 H2O	636	24.043	65.423	-0.336	1.00	73.38	W	ATOM	4088	H1 H2O	664	26.870	24.838	7.876	1.00	0.00	W
ATOM	4046	H1 H2O	636	24.179	65.781	-1.228	1.00	0.00	W	ATOM	4089	H2 H2O	664	27.001	25.362	6.496	1.00	0.00	W
ATOM	4047	H2 H2O	636	23.469	66.096	0.054	1.00	0.00	W	ATOM	4090	OH2 H2O	665	23.367	30.554	12.167	1.00	49.69	W
ATOM	4048	OH2 H2O	638	38.984	67.955	-11.226	1.00	29.97	W	ATOM	4091	H1 H2O	665	24.026	30.006	11.707	1.00	0.00	W
ATOM	4049	H1 H2O	638	38.283	67.402	-11.580	1.00	0.00	W	ATOM	4092	H2 H2O	665	22.941	31.016	11.438	1.00	0.00	W
ATOM	4050	H2 H2O	638	39.568	68.046	-11.998	1.00	0.00	W	ATOM	4093	OH2 H2O	666	46.015	32.192	10.179	1.00	66.86	W
ATOM	4051	OH2 H2O	639	27.930	66.675	-7.733	1.00	43.40	W	ATOM	4094	H1 H2O	666	46.060	31.519	9.497	1.00	0.00	W
ATOM	4052	H1 H2O	639	28.192	67.028	-6.876	1.00	0.00	W	ATOM	4095	H2 H2O	666	45.411	31.827	10.833	1.00	0.00	W
ATOM	4053	H2 H2O	639	26.975	66.791	-7.705	1.00	0.00	W	ATOM	4096	OH2 H2O	667	38.943	37.883	11.978	1.00	47.87	W
ATOM	4054	OH2 H2O	643	50.619	62.802	0.813	1.00	36.55	W	ATOM	4097	H1 H2O	667	39.367	37.487	11.188	1.00	0.00	W
ATOM	4055	H1 H2O	643	51.575	62.904	0.824	1.00	0.00	W	ATOM	4098	H2 H2O	667	38.521	37.114	12.362	1.00	0.00	W
ATOM	4056	H2 H2O	643	50.301	63.665	0.525	1.00	0.00	W	ATOM	4099	OH2 H2O	671	33.437	58.101	2.269	1.00	46.65	W
ATOM	4057	OH2 H2O	646	62.897	38.367	3.759	1.00	73.55	W	ATOM	4100	H1 H2O	671	33.555	57.162	2.433	1.00	0.00	W
ATOM	4058	H1 H2O	646	62.414	38.098	2.978	1.00	0.00	W	ATOM	4101	H2 H2O	671	33.962	58.514	2.961	1.00	0.00	W
ATOM	4059	H2 H2O	646	62.244	38.247	4.461	1.00	0.00	W	ATOM	4102	OH2 H2O	672	27.551	31.314	20.022	1.00	30.15	W
ATOM	4060	OH2 H2O	650	29.587	68.480	-9.555	1.00	65.67	W	ATOM	4103	H1 H2O	672	27.929	32.042	20.533	1.00	0.00	W
ATOM	4061	H1 H2O	650	28.846	68.630	-10.148	1.00	0.00	W	ATOM	4104	H2 H2O	672	26.845	31.764	19.552	1.00	0.00	W
ATOM	4062	H2 H2O	650	29.180	67.844	-8.936	1.00	0.00	W	ATOM	4105	OH2 H2O	673	25.714	36.908	21.385	1.00	36.95	W
ATOM	4063	OH2 H2O	652	51.408	56.331	4.056	1.00	62.90	W	ATOM	4106	H1 H2O	673	24.806	37.123	21.637	1.00	0.00	W
ATOM	4064	H1 H2O	652	50.718	56.353	3.365	1.00	0.00	W	ATOM	4107	H2 H2O	673	25.599	36.284	20.654	1.00	0.00	W
ATOM	4065	H2 H2O	652	51.052	55.671	4.648	1.00	0.00	W	ATOM	4108	OH2 H2O	674	38.244	66.897	12.076	1.00	57.36	W
ATOM	4066	OH2 H2O	653	49.404	56.022	2.161	1.00	51.28	W	ATOM	4109	H1 H2O	674	37.773	67.536	12.626	1.00	0.00	W
ATOM	4067	H1 H2O	653	49.442	55.351	1.474	1.00	0.00	W	ATOM	4110	H2 H2O	674	38.153	66.104	12.618	1.00	0.00	W
ATOM	4068	H2 H2O	653	49.323	56.829	1.630	1.00	0.00	W	ATOM	4111	OH2 H2O	675	35.762	36.553	-3.986	1.00	58.40	W
ATOM	4069	OH2 H2O	654	68.215	42.294	-2.563	1.00	40.77	W	ATOM	4112	H1 H2O	675	35.600	37.449	-3.677	1.00	0.00	W
ATOM	4070	H1 H2O	654	68.347	41.745	-1.777	1.00	0.00	W	ATOM	4113	H2 H2O	675	35.549	36.642	-4.923	1.00	0.00	W
ATOM	4071	H2 H2O	654	68.189	43.181	-2.190	1.00	0.00	W	ATOM	4114	OH2 H2O	676	30.689	32.814	25.675	1.00	59.30	W
ATOM	4072	OH2 H2O	655	66.374	40.425	-2.489	1.00	42.31	W	ATOM	4115	H1 H2O	676	30.093	33.571	25.680	1.00	0.00	W
ATOM	4073	H1 H2O	655	66.936	41.162	-2.766	1.00	0.00	W	ATOM	4116	H2 H2O	676	31.550	33.214	25.540	1.00	0.00	W
ATOM	4074	H2 H2O	655	66.452	39.841	-3.252	1.00	0.00	W	END									

FIG. 6A

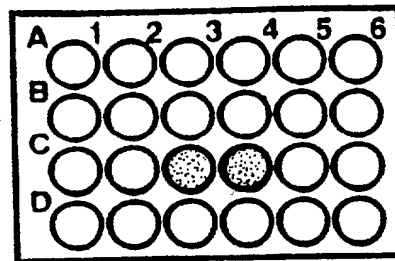


FIG. 6B

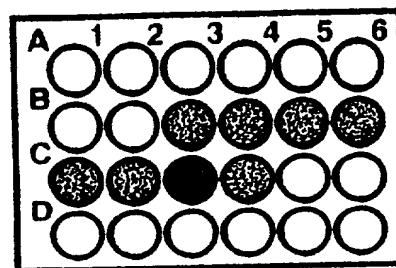


FIG. 6C

